



Annual Report

Volumes I and II

July 2001 – June 2002

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ACRONYMS

AUE	Association des Usagers de l'eau (Water Users Association)
AUP	Association des Usagers des Pistes (Road Users Association)
AGERAS	Appui à la Gestion Régionalisée et à l'Approche Spatiale
AGEX	Agence d'Execution
ANAE	Association Nationale pour les Actions Environnementales
ANGAP	Association Nationale pour la Gestion des Aires Protégées
AQUALMA	Aquaculture de Mahajamba
ATS	Association Tefy Saina
BEST	Bureau d'Expertise Sociale et de Diffusion Technique
BRF	Bois Rameaux Fragmenté
BTM	Bankin'Ny Tantsaha Mpamokatra
BOA	Bank of Africa
CAF	Cellule d'Appui Forestier
CANFOR	Cantonement Forestier
CANFORET	Forest Service Cantonment
CAP	Commercial Agricultural Promotion
CDC	Comité de Développement Communal
CDD	Departmental Development Committee
CCEE	Centre Culturel pour l'Education à l'Environnement
CCV	Centres Culturels Villageois
CDIA	Centre de Diffusion pour l'Intensification Agricole
CE	Conservation Enterprises
CEIF	Conservation Enterprises Investment Funds
CEM	Caisse d'Epargne de Madagascar
CGS	Community Granary Storage
CIIFAD	Cornell International Institute for Food, Agriculture and Development
CIIFOR	Cornell International Institute for Forestry
CIM	Centre d'Interpretation de Moramanga
CIRAGRI	Circonscription de l'Agriculture
CIREL	Circonscription de l'Elevage
CIREF	Circonscription des Eaux et Forêts
CIRPECH	Circonscription de la Pêche et des Ressources Halieutiques
CITE	Centre d'Information Technique et Economique
CJPM	Comité Jean Pain Madagascar
CLB	Comité Local de Base
COPIL	Comité de Pilotage
CPSE	Comité de Planification et de Suivi & Evaluation
CPF	Counterpart Funds
COP	Chief of Party
CRD	Comité Régional de Développement
CTA	Cellule d'appui Technique (AGERAS)
DPV	Direction de la Protection des Végétaux
DIREF	Direction des Eaux et Forêts
EAM	Entreprendre à Madagascar
EASTA	Ecole d'Application des Sciences Techniques et Agricoles
ECOCERT	Entreprise de Certification Organique/biologique
EFE	Entreprises Favorables à l'environnement
EIA	Environmental Impact Assessment
EJ	Expert Junior
EP II	Environmental Program 2
ESSA	Ecole Supérieure des Sciences Agronomiques
ETN	Eco-Tourisme Nord
FENU	Fonds d'équipements des Nations Unies
FMG	Malagasy Francs
FCE	Fianarantsoa Cote Est Railroad
FID	Fonds d'intervention pour le Développement
FIEFE	Fonds d'investissement pour les entreprises favorables à l'environnement
FITIM	Filature et Tissage de Madagascar (Spinning and Weaving of Madagascar)
FOFIFA	Foibe Fikarohana ho amin'ny Fampandrosoana ny eny Ambanivohitra
GAIM	Groupement Agro-Industriel de Moramanga
GCRN	Gestion Communautaire des Ressources Naturelles
GCV	Greniers Communautaires Villageois (Community Grain Storage Facilities)
GELOSE	Gestion Locale Sécurisée
GIS	Geographic Information System
GPF	Gestion Participative des Forêts
GPS	Global Positioning System
GTDR	Grpoe de Travail pour le Développement Régional (PADR)
GR	Génir Rural
IPNR	Institut pour la Promotion Nationale de la Riziculture
IR	Intermediate Result

IRRI	International Rice Research Institute
ISC	Input Supply Centers
KH	Kolo Harena
LDI	Landscape Development Interventions
MARP	Méthode Accélérée de Recherche Participative
M&E	Monitoring & Evaluation
MEF	Ministère des Eaux et Forêts
MIRAY	Consortium PACT – Conservation International – WWF
MSC	Malagasy Seafood Company
NRM	Natural Resources Management
NGO	Non-Government Organization
ODAI	Opération de Développement Agricole Intégré
ODASE	Opération de Développement Agricole du Sud Est
ONE	Office National de l'Environnement
OTIV	Mutuelle d'Epargne et de Crédit
PACT	Private Agencies Collaborating Together
PCR	Plan de Communication Régional
PE1	Programme Environnemental #1
PDRAB	Projet de Développement Régional d'Ambato Boeni
PPIM	Programme Pilote Intégrée de Mahajanga
PLAE	Programme de Lutte Anti-Erosive
PMF	Participatory Forest Management
PNLCP	Programme National de Lutte Contre la Pauvreté
POLFOR	Politique Forestière
PRA	Participatory Rural Appraisal
PRB	Projet Rizicole de Betsiboka
RFPD	Regional Forestry Plan Director
RN	Route Nationale
RRA	Rapid Rural Appraisal
RS	Ressources Vertes
SAF/FJKM	Sampan'Asa Fampandrosoana de l'Eglise Protestante
SFR	Sécurisation Foncière Relative
SO3	Strategic Objective # 3
SR	Sub-Result
SRI/SRA	Système de riziculture Intensif/Système de riziculture amélioré
SZI	Strategic Zone of Intervention
WWF	World Wide Fund
YNC	Young Naturalist Clubs
ZSI	Zone(s) Stratégique(s) d'Intervention
ZIE	Ecotourism Investment Zones

Table of contents

Volume I

1. Overview

1.1 Main results

1.2 Key Results

1.3 LDI Success stories

Fianarantsoa

Moramanga

1.3 Summary of LDI 2001-2002 targets

2. Antananarivo Office

2.1.1 Agricultural Intensification

2.1.2 Community-Based Natural Resources Management

2.1.3 Environmental Education and Communication

2.1.4 Promotion of Conservation Enterprises

2.1.4 Local Community Capacity Building

2.1.5 Counterpart Funds

2.1.6 Monitoring and Evaluation

2.1.7 LDI Partnership with Institutions and Organizations

2.1.8 Training and Research

2.1.9 Finances and Administration

2.1.10 Administration

2.1.11 Value Added Tax (VAT) and Import Taxes and Duties (DTI)

3. Antsiranana Region

3.1 Principal Activities undertaken in Antsiranana

3.2 Accomplishments July 2001– June 2002

4. Fianarantsoa region

4.1 Main results

4.1.1 Ecoregional support

4.1.2 Agricultural Intensification

4.1.3 Community-Based Natural Resource Management

4.1.4 Promotion of Conservation Enterprises

4.1.6 Reinforcement of Local Capacity Building

4.2 Performance Analysis

4.2.1 Qualitative Analysis

4.3 Quantitative Analysis

4.3.1 Performance according to indicators

4.3.2 Analysis of Indicators

5. Mahajanga Region

6. Moramanga Region

Context

6.1 Principal Results

6.1.1 Eco-regional support

6.1.2 Agricultural Intensification

6.1.3 Community-based Natural Resource Management

6.1.4 Communication and Environmental Education

6.1.5 Promotion of Conservation Enterprises and FIEFE

6.1.6 Capacity building

6.1.7 Monitoring and evaluation

6.2 Performance Analysis

6.2.1 Qualitative Analysis

6.2.2 Quantitative analysis

Volume II

Annexes

1. Liste des Entreprises Favorables à l'Environnement appuyées par LDI
2. Liste des Partenaires de LDI
3. Liste des étudiants chercheurs ayant réalisés des recherches en collaboration avec LDI

1. Overview

This report concerns LDI's regular activities from July 2001 through June 2002. Quarterly reports on cyclone recovery activities were submitted to USAID in September and December 2001, and in March and June 2002.

1.1 Impacts of the political crisis and immediate response interventions

Since December 2001, Madagascar has been deeply affected by a political crisis of devastating economic and environmental proportions, especially in rural communities throughout the country and, in particular, in LDI's areas of intervention. However, our offices remained open everywhere and were able to successfully carry out most of our field activities, in spite of serious constraints caused by fuel shortage, road blockades and security problems.

We didn't lay off any local employee. On the contrary, some of them had to fill positions and share responsibilities previously held by expatriates who were temporarily evacuated. Our staff, generally speaking, has been very motivated and has shown a remarkable aptitude to cope with the stress and uncertainty generated by the political crisis. Unfortunately, the implementation of some activities was delayed. For instance, we signed only 3 contracts of GCF instead of 5, credit funds could not be disbursed as planned, because of administrative and transport problems, FCE privatization was slowed down, and our ecotourism activities in Diego were stopped, since the northern region was out of reach.

In addition to our regular activities, we started to implement a series of specific interventions designed to reinforce the protection of priority ecosystems and help farmers and eco-enterprises overcome the disastrous effects of the current economic crisis. These initiatives have emerged out of a participatory process of in-depth discussions with Malagasy government, non-governmental, and eco-enterprise partners. In most regions where we intervene, LDI has been the leading project that has provided rapid, efficient and direct assistance to rural communities affected by a severe drop of farmgate prices and a huge increase in prices of basic foodstuffs and other basic commodities. The essence of our success lies in the rapidity of our reaction to this crisis. We initiated in May 2002 four categories of "crisis-response" interventions in addition to, and in synergy with, our regular activities:



LDI staff with its donors and implementing partners during the political crisis evaluation and crisis-response session in May 2002

a) Financial and technical assistance for the storage and commercialization of crops recently and currently harvested

LDI has launched a crisis-specific, technical and financial package to help farmers in our zones of intervention, in Moramanga and Fianarantsoa provinces, better store and market their crops to accomplish four objectives:

- Maintain farmer income at a level equivalent to the average of the past three years

- Generate immediate cash flows for rural households to purchase urgently needed consumer goods
- Ensure an adequate supply of rice to urban centers
- Help farmers properly store most of their production until markets and prices return to normal

We started by setting up “Commercialization Fund” in the Lac Alaotra region and in the Fianarantsoa province, which functions as a revolving fund that will continue to help farmers commercialize their crops in the future. A procedures manual has already been written for this component based on our experiences with setting up small *greniers villageois* throughout LDI’s Strategic Zones of Intervention.

b) Special access to credit, technical assistance and agricultural inputs for farmers growing off-season and cash crops

The disruption of input supply networks during the political and economic crisis resulted in a situation in which farmers can neither locate nor afford to purchase the agricultural inputs they so badly need for their off-season crops of potatoes, beans, and vegetables. Given the critical situation farmers presently face, it is crucial that they obtain short-term credit much quicker than usual and benefit from strong technical assistance provided by LDI. Finally, it’s becoming increasingly clear that the implementation of major rural development programs, such as the PSDR, will be seriously delayed. These programs will not be able to respond in a timely fashion to farmers’ requests for financial and material support. In light of these constraints, LDI has launched the following activities in all Strategic Zones of Intervention in order to help Kolo Harena associations produce off-season crops:

- Provision of Agricultural Inputs: LDI provided seeds (mainly potatoes and beans), small agricultural tools and fertilizers to existing Kolo Harena managed Input Supply Centers which will in turn sell these supplies to their members under a nine to twelve month credit arrangement.
- Kolo Harena Federation Equipment Leasing Mechanism: LDI has initiated a new type of financing that will enable Kolo Harena Federations to lease and eventually acquire small rural equipment such as rice hullers, coffee hullers, small pumps, and other tools. One of the goals of this operation is to provide the equipment necessary to process raw materials and increase the added value and the price of commodities sold by farmers.
- Kolo Harena Federation Credit System: In some remote rural areas of the Fianarantsoa region that are not easily accessible to our partners (Entreprendre à Madagascar, BOA...), LDI has developed new credit system that will be directly managed by Kolo Harena Federations without any intermediaries.

c) Increased technical and financial assistance to eligible eco-enterprises

The LDI team conducted a survey to assess the impacts of the crisis on eco-enterprises that have been working with us over the past three years. Based on 43 responses we received at the end of April, 63% experienced a decline of more than 50% of their sales and 44% were forced to close momentarily. These firms recommended that LDI contribute to the resolution of immediate cash-flow problems, finance new investments, and strengthen their relations with commercial partners and farmer associations. LDI believes that it is necessary to assist those companies that are fundamentally healthy and have the capacity to survive, in spite of present difficulties, especially if they maintain strong links with farmer associations.

In that spirit, we opened a second window in the “Fonds d’Investissement pour les Entreprises Favorables à l’Environnement (FIEFE)”, which provides short term credit to eligible eco-enterprises on a case by case basis and which has the following characteristics:

- Loans are granted by commercial banks that are part of the FIEFE mechanism after a careful analysis of each request. A final response will be given to applicants in less than three weeks and, if applicable, funds will be released immediately.
- Loans are fully covered by adequate collateral, such as stocks of raw materials or processed products, and are paid back in a maximum of 12 months.
- Interest rates are equal to the “taux directeur” of the Central Bank plus 4%.
- All other FIEFE features remain the same.

Each beneficiary must establish a detailed program (*Plan de sortie de crise*) that clearly and concretely shows how the company intends to resolve its procurement, marketing and human resource problems, to fully pay back the loan and resume normal operations.

d) Increased protection of priority ecosystems

The history of Madagascar shows that during political upheavals, deforestation and slash and burn agriculture significantly increase. This is generally a consequence of popular discontent and the collapse of public institutions at the national, regional and local levels that are responsible for enforcing laws and regulations governing natural resources management. But there are times when farmers often expand slash-and-burn agriculture because they can no longer sell cash crops on the national and international market, and as a result, they lack the cash earned to purchase food supplies. Lacking the ability to earn cash, they expand agriculture into the forests as a strategy to assure household production of rice for immediate family consumption. The political crisis of the past months threatens to accelerate rates of deforestation through the expansion of tavy agriculture and illegal forest extraction.

In light of LDI's specific mandate "to reduce the expansion of agricultural lands threatening priority ecosystems", we decided to focus our efforts on the protection of both sides of the forest corridors and other priority ecosystems, in our priority zones of intervention in Fianarantsoa and Moramanga, against increased tavy-related pressures resulting from the recent political and economic crisis. We had the first discussions and made the preliminary contacts to initiate the following activities, under this component of our «crisis response plan».

- Environmental Education, Information and Communication

More than ever, we must closely work with regional and local civil servants to strengthen the common vision of eco-regional development and build stronger commitment of all individuals from the level of the Président de Faritany (Governors) to local agents of the Ministry of Eaux et Forêts. The new Président de Faritany must be rapidly briefed and their team trained, while field agents must receive special technical and material assistance during the recovery period.

- Expanded Transfers of Forest Management to Local Communities

In response to this crisis, we have decided to accelerate and broaden forest management transfers to local communities through the Gestion Communautaire des Forêts (GCF) approach and contracts in both Fianarantsoa and Moramanga regions with a target of 6,000 ha by June 2003. We are confident that these results can be reached due to the continued manifestation of interest by rural communities in the GCF so successfully launched these past months along the forest corridors of these two provinces.

- Special Support to Protected Areas

The national park system has been severely threatened by the lack of tourism revenue generated from park fees. National parks throughout the country are encountering difficulties maintaining hiking trails, buildings, roads, and other infrastructure needed to attract visitors. LDI had important discussions with the Ministry of Tourism to finalize the creation of "Ecotourism Investment Zones" in Ankarana and Amber Mountain, and take the necessary steps to protect investments made during the past few years in park infrastructures.

- Revival of Eco-tourism

Ecotourism has been the most affected sector by the political crisis. Madagascar's image as a unique destination has been severely damaged and it will take some time to bring tourists back in the country. The



entire sector needs a massive and coordinated effort to reconstruct the ecotourism economy. This effort will consist primarily of putting in place a series of measures to attract anew tourists and tourism operators.

LDI has just completed a film on ecotourism in Madagascar as part of an international marketing campaign promoting Madagascar as a destination. We have also started fruitful discussions with the Government to design a comprehensive strategy for the revival of ecotourism.

1.2 Key results

Although activities slowed down somewhat in the second semester because of the crisis, LDI achieved and even exceeded a number of contractual indicators for this year.

- **Kolo Harena Associations.** The number of Kolo Harena Associations increased from 442 with 10250 members in July 2001 to 648 with 15,668 members in June 2002, of which 432 associations are supervised under regular activities. A total of 17 Kolo Harena federations exist. The practice of improved techniques was made obvious by increased yields and by the growing number of Kolo Harena associations using new agricultural methods, although supervision activities were less intensive in comparison with previous year. These results partly illustrate the work of “*paysans vulgarisateurs*” (peasant extension agents) whose contribution is becoming more substantial. In order to make LDI activities sustainable, and especially to make Kolo Harena farmers aware of their responsibilities, we introduced a “farmer to farmer” extension system. To date, 329 “*paysans animateurs*” and “*paysans vulgarisateurs*” received organizational training and technical training, respectively, in order to expand use of improved practices and continue interventions when the LDI Program is over. However, the success of the “farmer to farmer” transfer process does not depend only on the knowledge of “*paysans vulgarisateurs*” and the good examples they set. The effective implementation of this approach will require measures aimed chiefly at making “*paysans vulgarisateurs*” willing and able to facilitate exchanges, to communicate, to train other farmers, and particularly to have the confidence of their peers.
- **Agricultural Yields and Family Revenues.** Significant increases in yields were recorded where data were available. For example, rice yield almost quadrupled and jumped from 2.2t/ha to 10.2t/ha. Figures on off-season crop yields are not yet available for this year since crops were effective on May-June. Income data are not yet available; farmers have yet been paid because of transportation problems getting their crops to market.
- **Community-Based Natural Resource Management.** A total of 9 participatory forest management contracts were signed in all LDI's zones of intervention, of which 4 were signed this year. These contracts cover approximately 6,120 ha of forests and marshes; and benefit more than 1120 farmers members of the Comités de Base (COBA). LDI interventions are focused on the implementation of these contracts by providing COBA members with monitoring and management tools and training them to respect the economic, technical and environmental dimensions of resource management.
- **Eco-enterprises.** LDI provided support to 17 new EFE. Thus, a total of 89 EFEs are assisted by LDI. Five projects were endorsed for financing by FIEFE's financial institutions for a total amount of MGF 1.269 billion. Six members of PRONABIO participated in the Natural Products Expo, which took place in Washington in October 2001. PRONABIO has about thirty members whose market relations with Kolo Harena started with Homéopharma and Biosave in the ginger, orange and clove sector. Following the business trip of EFE operators in South Africa, an agreement was signed by LDI, PRONABIO and the agency SOFRIMEX. The latter will represent PRONABIO in the South African market. For this purpose, it will disseminate information regarding South African clients' orders as well as natural product offers from Madagascar. The eco-label “Natural Products of Madagascar” is being finalized with the collaboration of Rutgers University (USA), local laboratories and exporters. A group of laboratories in Madagascar prepared a report on a grading scale for the composition of essential oils and spices in accordance with international standards. In addition, a legal study on the implementation of this label showed that a collective brand is the most appropriate form. PRONABIO may proceed to certification only in a private capacity, in accordance with the applicable law. Brand deposit at the OMAPI as well as the financial feasibility study are underway.
- **“Tavy” Reduction.** Study results in 3 pilot sites showed that the amount of tavy dropped in all three sites. Kolo Harena farmers supervised by LDI no longer practice tavy.

Kolo Harena farmers no longer practice tavy in test village because:

- They are engaged in improved and multi-faceted production systems, and are motivated by an increase in revenues (38 percent), so they have less free time for other actions and are increasingly convinced that *tavy* is not the right choice.
- The application of *dinas* (by-laws) forbidding *tavy* and other destructive practices governs the members of the associations and limits their digressions.

The existence of participative forest management contracts (GCF) limits the granting of clear-cutting permits to people who do not belong to village associations.

Nevertheless, the impacts of reducing agricultural lands encroaching on priority ecosystems are still limited for two main reasons: (1) Kolo Harena farmers are still a minority in the ZSI, at less than 10 percent of the total population; (2) farmers of the most disadvantaged social strata are often excluded from Kolo Harena associations, although they represent a serious source of environmental degradation. Specific actions must be taken to address this issue.

The official report of pressure monitoring in test villages is now available. The monitoring and evaluation team is preparing the next step to expand the methodology and include a much larger group of farmers, at the ZSI level. The work in the field will begin earlier in July 2002.

• Improved management and privatization of FCE.

We are pleased to report that significant progress has been achieved under this component of LDI. During the last six months:

- Following intense training of FCE's administrative staff and installation of a new software package for payrolls, inventory and sales, the southern railway had a positive cash flow for the first time in many years.
- The privatization process was officially launched by the Ministry of Transport in December 2001, with the support of the Ministry of Privatization. The new Government adopted in June 2002 the strategy of "mise en concession croisée" for FCE and the port of Manakara proposed by LDI, which will ensure a better technical and financial integration of both companies, without delaying the privatization of the southern railroad.
- A major study on the Fianarantsoa regional transport and a cost benefit analysis of the port of Manakara have been completed and lead to a series of key conclusions: it is definitely cheaper to export commodities from the eastern side of the corridor by rail and sea, via Toamasina. It is also cheaper to import petroleum products in Fianarantsoa using the same transportation modes. As far as the port of Manakara is concerned, the LDI team, composed of foreign and national experts, recommended rehabilitating existing facilities, improve work conditions and assure adequate supply of petroleum products to the region. In the future, the port could be containerized either by creating a deep water port allowing passages of freighters or by building a breakwater to create a sheltered anchorage inside the reef. Further technical and environmental studies will be necessary to determine the best option.
- On October 15, 2001, LDI and FCER organized a donor roundtable, under the auspices of the Ministry of Transport, to present the master plan for FCE rehabilitation and the strategy for its privatization, as well as the main conclusions of the regional Transport Study. This official meeting, attended by all major donors, was a great success and resulted in the full endorsement of both, the master plan and the privatization strategy, by the World Bank and other donors. In the following weeks, the World Bank, in particular, pledged not only to provide \$8 million for FCE rehabilitation, but also to fund all consultancies and studies related to the "mise en concession" of the southern railroad. These funds are contingent on successful concessioning of the railroad.



- During the crisis, LDI and the PST (Project Sectoriel Transport) team, funded by the World Bank, worked closely together to move ahead with the privatization process. Two contracts were signed, one with a foreign specialist, the other with a local consulting firm to prepare all bidding documents for the tender that will be launched before the end of the year.
- In light of the road blockades and bridge destruction, it became more obvious that the Port of Manakara had a strategic importance for the Fianarantsoa region and needed to be dredged as soon as possible to allow a more efficient unloading of petroleum products and other key merchandises. LDI and the PST team launched together an important technical and environmental survey for the urgent dredging of the Port of Manakara.

1.3 LDI Success stories

Fianarantsoa

Ranomafana Agricultural Supply Center

The LDI program has set up agricultural supply centers throughout the Fianarantsoa and Moramanga regions. These centers sell agricultural inputs and other essential products to surrounding rural communities. These centers also supply rural credit to Kolo Harena members. The supply centers are now operated by Kolo Harena farmers' associations and federations. The case of the Agricultural Supply Center at Ambatovaky, a small village near the Ranomafana National Park, is an illustrative example of these centers.

LDI Fianarantsoa provided training to the Agricultural Supply Center farmers in Ambatovaky through the services of *Entreprendre à Madagascar*. Following the departure of the *expert junior* in 2001, the center has been run by a committee of the Kolo Harena Federation. The COGE management committee now manages a revolving fund of 35 million FMG used to purchase agricultural inputs in bulk in Fianarantsoa for resale locally at an appropriate profit. Over the past year, the center has generated a gross profit of 5 million FMG. The rural credit program operated by the center has led to a 98% repayment rate.



The management committee manages a revolving fund of 35 million FMG used to purchase agricultural inputs in bulk in Fianarantsoa for resale locally at an appropriate profit

The Ambatovaky Agricultural Supply Center is now run entirely by small farmers. While many outsiders expected the center to fail because "farmer's can't run their own stores or credit programs", it now seems that the reason for the success of the center is that a democratically elected management committee was provided the training, authority, and initial capital to set up a supply center to meet the local needs for good quality seeds, fertilizers, and other inputs. The management committee is comprised of representatives of all the service areas and consists of both well off and poorer members who have the skills and authority to review credit and repayment transactions. The transparent decision-making process thus assures good surveillance of accounts and financial procedures. This model farmer-led agricultural supply center now serves as a farmer-to-farmer training forum for other centers throughout the province.

Fingerling Production Centers

The LDI Fianarantsoa program reported in previous annual reports successes achieved in launching fresh-water fish production in its strategic zones of intervention. At the outset of the program three years ago, LDI purchased about 7000 fingerlings for a few farmers interested in starting integrated rice-fish culture and fish ponds stocked primarily with Royal Carp. The popularity of the initial experiments in fish production led to

the establishment of privately run and decentralized fingerling production centers to sell fingerlings to surrounding farmers in each of the strategic zones of intervention. Training was provided to Kolo Harena members to help them set up and manage these fingerling production centers.

The seven centers the length of the Ranomafana-Andringitra forest corridor are now the major suppliers of fingerlings for the entire province of Fianarantsoa. This past season the centers sold 49,000 fingerlings – a four-fold increase in production over the first year's sales. This represented revenues of approximately 13 million FMG. The demand for fingerlings far exceeded the supply with buyers coming not only from nearby villages but also from distant Manakara, Mananjary, Vohipeno and Ihosy. Several development projects bought considerable numbers of fingerlings as well. Most buyers from afar paid cash on the spot for their stocks, but in other cases various in-kind credit arrangements were set up with nearby farmers. The owners of the fingerling centers often provide instruction to buyers at the time of sale and some have been hired by neighboring Kolo Harena associations to provide long-term technical assistance.

While these specialized sellers of fingerlings have now acquired the technical skills to produce fingerlings, LDI continues to work with them to refine marketing strategies in order to meet the enormous demand for fingerlings from the regional and national markets. Fingerling production is expected to continue to increase dramatically as farmers throughout the Fianarantsoa province witness the benefits of raising fish to meet house needs but also immediate market demands. With this decentralized and privately owned system for selling fingers, LDI is confident that a sustainable production system is now well in place.

Moramanga

Improvement of the Lovoka Irrigated Perimeter

Despite the irregular fuel supply caused by the crisis and the related difficulties, the supervision of the Lovoka perimeter and the peripheral areas for improved rice growing and direct sowing was pursued as normal thanks to arrangements taken by the field teams and the partner BRL. Improvement activities covered the perimeter of upstream Lovoka (335.15 out of 340 ha, i.e. 98.6%), the Ankeniheny perimeter (118.71 out of 280 ha, i.e. 42.4%), and the Manorenja perimeter (78.49 out of 190 ha, i.e. 41.3%) for a total of 532.35 ha improved out of the 810 ha, i.e. 65.7%. The flexible technical itineraries adopted based on local physical and socioeconomic conditions included the SRI, the SRA improved transplanting, young plants in mass, and improved irrigated direct sowing. This flexibility was much appreciated by Kolo Harena associations who could assess by themselves the practices recommended. The average yields produced are 3.98 t/ha against 6.16t/ha for the SRI, 5.54t/ha for the improved transplanting, 5.23t/ha for young plants and 4.2t/ha for the improved direct sowing. An average yield profit of 1.2 t/ha helped water users to recover costs. In effect, the supervision is not limited to agricultural intensification. It also includes the assistance to water users in their activities. As a Water Users Association (WUA), Kolo Harenas benefited by a fee reimbursement rate of 99.1 percent. Three WUAs were set up and grouped together within a federation with a total of 781 members.

In addition, the development of the direct sowing technique and the promotion of off-season crops open up new horizons and perspectives for an effective profitability of investments realized by LDI in this perimeter designed to be a model of full-scale agricultural intensification.

The Lovoka Irrigated Perimeter of (Imerimandroso)

	Prior to LDI assistance			2000 – 2001 campaign			2001 – 2002 campaign		
	Surface (ha)	Yields (t/ha)	Production (t paddy)	Surface (ha)	Yields (t/ha)	Production (t paddy)	Surface (ha)	Yields (t/ha)	Production (t paddy)
Irrigated off-season rice (flood-prone areas)	0	0	0	60	4.93	296	218	3.45	752
Irrigated rice	130	2.5	325	320	4.53	1450	525	4.20	2,205
Pluvial rice	220	1.2	264	0	0	0	0	0.00	0
Total for the year	350	1.68	589	380	4.59	1,746	743	3.98	2,957

Rice yields during 2000-2001 campaign were exceptional, as parcels have been under fallow since 1996-1997.

CDIA Marolafa Beforona

After two years of operation and learning, the CDIA Marolafa could optimize its management. This year, the management manual developed in 2001 was implemented and reviewed. Activity programming based on previous analytical results encouraged a rational management of labor, one of the largest budget items. The number of income-generating activities increased : training and service delivery in association with the project MGHC financed by the Packard Foundation ; TV programs on topics related to the environment ; rentals ; sales of farm products. This year, the CDIA recorded 576 visits of farmers. The revolving funds covered 34 percent of expenditures, and empowerment was reinforced within the Kolo Harenas, namely the Kolo Harena Federation Tongalaza. This resolution to forge ahead in order to achieve autonomy combined with the positive results in international research persuaded other donors to support the activities of the CDIA. In effect, thanks to the assistance of Erika Styger, a student who successfully realized her PHD internship at the center, the Roger Haus Foundation donated an amount \$15,000 for the investments of the center through December 2002. This donation will improve the center's capacity of reception and its accommodation, catering and training logistics conditions. A 50% autonomy will become a reality by the end of this period.

1.4 LDI Performance compared to 2001-2002 objectives

A summary of LDI 2001-2002 performance is shown in the table below:

Indicators 2001-2002	LDI Quantified Objectives	Réalisation juillet 2001 – juin 2002	Notes on the Indicator
Activity Level			
Agricultural Intensification <ul style="list-style-type: none"> - Production increase - Income increase - allocated credit 	<ul style="list-style-type: none"> - 10-20% - 10-20% - \$120,759 of which 40,378 are new. 	<ul style="list-style-type: none"> - min 30%, max 321%¹ - 34% en moyenne - \$45,916 of which \$25,050 are new 	<p>Minimum and maximum yields in T/ha according to data available : rice = 2.1 and 10.2; maize = 0.85 and 3.5 ; beans = 0.4 and 2.7; off-season potatoes = 12 and 22.</p> <p>Credit granting by financial partners was much delayed. Several associations had to withdraw.</p>
Environmental Education <ul style="list-style-type: none"> - Number of activities targeting Kolo Harena 	<ul style="list-style-type: none"> - 6 activities 	<ul style="list-style-type: none"> - 6 activities 	<p>Ginger cultivation and GCF posters are finalized. The 2nd issue of the Kolo Harena journal is available. Other actions such as the broadcasting of technical themes (health-environment activities ; alternatives to tavy ; credit ; improved ovens) on regional radio stations and RAA were also followed by debates between Kolo Harena members. The promotion of PSI products ; Kolo Harena days and fairs ; lavaka stabilization and watershed protection should also be mentioned.</p>
Community Management of Natural Resources <ul style="list-style-type: none"> - number of signed contracts - number of villages engaged in community conservation - number of villages engaged in sustainable use of natural resources - implementation of signed contracts 	<ul style="list-style-type: none"> - 5 contracts - 60 villages - 340 villages - 5 contracts 	<ul style="list-style-type: none"> - 4 contrats signés - 75 villages - 366 villages - 5 contrats 	<p>2 contracts for 457 ha of <i>zetra</i> managed by 91 COBA members signed in October 2001 in Lac Alaotra, one contract for 56 ha managed by 90 COBA members in Belalitra Mahajanga and one contract of 430 ha of forest in Fianarantsoa .</p> <p>The community composed of 1122 members a total of 6121 ha of forests and <i>zetra</i> manages. It should be noted that Kolo Harena realized 40ha reforestation in Fianarantsoa.</p> <p>The 5 contracts signed in 2000/2001 are under implementation according to the scope of work. COBA are assisted by forest technicians, trainees and <i>experts juniors</i>.</p>
Promotion of EFE <ul style="list-style-type: none"> - number of EFE supported by LDI - total investments by supported EFE - Disbursement of FIEFE funds - establishment of commercial relations between EFE and Kolo Harena 	<ul style="list-style-type: none"> - 60 EFE - \$360,000 - \$152,440 - 2,260 farmers 	<ul style="list-style-type: none"> - 89 EFE - 8 EFE pour \$1,341,000 (cumul) - \$88,889 - 3095 paysans 	<ul style="list-style-type: none"> - The Nature Lodge project in Antsiranana is the 5th project approved for financing under the FIEFE. FIEFE's total disbursement is \$154,200. Funds deblocking for Biosave was delayed by the political crisis. - The sectors concerned are : potatoes, honey, orange, royal carp, ginger, cinnamon, Bois Raméau Fragmenté, onion, rice and dried fruits

¹ The increase in production and revenue is based on figures collected in the "cahiers de ménages"

Capacity Building <ul style="list-style-type: none"> - Number of Kolo Harena associations - Number of Kolo Harena members - Number of farmer extension - Number of Kolo Harena Federations reinforced 	<ul style="list-style-type: none"> - 500 associations - 12,000 members - 140 animateurs villageois - 11 experts juniors 	<ul style="list-style-type: none"> - 648 associations - 15,668 membres - 329 paysans vulgarisateurs et animateurs - 12 Experts Juniors 	<p>Kolo Harena associations are divided into:</p> <ul style="list-style-type: none"> - 432 KH with 5154 members financed by regular funds ; - 178 KH and 26 AUE/KH with 8962 members financed by cyclone recovery funds ; - 13 KH/COBA with 1552 members for GCF. <p>It should be noted that 500 Kolo Harena members in Fianarantsoa withdraw following the restructuring of Kolo Harena in Ranomafana after the departure of Tefy Saina. These are farmers selected by their peers. Each <i>"paysan vulgarisateur"</i> receives training in a specific technical theme, and is expected to reproduce and train other KH members. <i>"Paysans animateurs"</i> conduct socio-organization activities among the members. <i>Experts junior</i> develop the capacity of federations in their relationships with technical, financial and commercial partners.</p>
Sub-level Outcomes			
Reduce the expansion of agricultural land in the priority ecosystems <ul style="list-style-type: none"> - monitor the evolution of pressures in the ZSI 	4 pilot sites: Andohanisoa, Ranomena, Ambalavero and Belalitra	Kolo Harena members in the studied pilot areas no longer practice <i>tavy</i> .	The report on pressure monitoring in test villages is available at LDI. Pressure monitoring in the ZSI will be effective as from July 2002.
Increase incentives for sustainable use of natural resource <ul style="list-style-type: none"> - Number of EFE created at regional level - Evolution of turnover - Number of created job opportunities 		<ul style="list-style-type: none"> - 17 EFE - data non available - 2172 emplois créés 	There were no quantifiable objectives given that show the results of LDI support in promoting the EFE. Those are EFE that came into existence dans les régions de LDI without the support of LDI. Ce sont : Madakoho, FIMPIMO-gemo, assoc amis 2 lacs, gaim, Volasoa, label CBD, Tsara Aromatika, Soalandy, koperativa MLA, Plantation Lamahoana, Plantation Beando, Biosave-trimeta, MENDRI, Eleveur SA-ICS, Ranomanitra, Ecubioprocess and Pronabio.
Reinforce the capacity of Kolo Harenas to undertake sustainable practices <ul style="list-style-type: none"> - number of people using the technique package - number of Kolo Harena members who participate in conservation and development activities 	<ul style="list-style-type: none"> - 50% - 20% 	<ul style="list-style-type: none"> - 3052 paysans, soit 48% - 3927 paysans, soit 62% 	
Intermediate Results			
Sustainable Use of Natural Resources <ul style="list-style-type: none"> - incidence of tavy - incidence of fire - incidence of charcoal production 		Further studies on pressures in the ZSI will be undertaken beginning in July 2002	Monitoring sites are identified in the ZSI of Fianarantsoa and Moramanga. The organization as well as the schedule is under development. The budget is in being finalized.

2. Antananarivo Office

2.1 Activity Components

2.1.1 Agricultural Intensification

Results obtained during the year are summarized below:

Kolo Harena Farmers

LDI supports 648 Kolo Harena Associations, which have 15,668 members. The objective of LDI support activities in agricultural intensification is to convince Kolo Harena farmers to use more efficient and more sustainable agricultural systems in order to increase their revenues while protecting natural resources. This year, actions were focused on developing associations' capacity to continue activities upon completion of the LDI program.

Repartition of Kolo Harena associations								
	Fianarantsoa		Mahajanga		Moramanga		Total	
	# KH Ass	# members	# KH Ass	# members	# KH Ass	# members	# KH Ass	# members
Kolo Harena Regular fund	276	2,882	59	872	97	1,400	432	5,154
Kolo Harena COBA	2	821	6	275	4	456	12	1,552
Kolo Harena CRP	14	1,872	-	-	190	7,090	204	8,962
Total	292	5,575	65	1,147	291	8,946	648	15,668

Agricultural Yields

Increases in yields ranged between 30 to 61 percent, according to activities and regions. For the year 2001-2002, several crops including rice are not harvested yet. Data will be completed in December 2002. The same applies to off-season crops, which started only in May/June 2002. We did not get the complete income data as the principal production was not sold during the period covering the report, due to the political crisis.

Range of agricultural yields (T/ha)	Fianarantsoa Year 2001-2002		Mahajanga Year 2000-2001		Moramanga Year 2001-2002	
	Min.	Max.	Min.	Max.	Min.	Max.
Rice	2.10	10.20	1.06	3.80	2.5	4
Maize	0.85	3.5	0.40	2.50		2.5
Cassava			4.20	6.50		
Potatoes*	10.65	22			1.5	18
Ginger					5	12
Beans	0.40	2.70			0.4	1.4
Onions					3.10	
Groundnuts			0.70	1.70		

Adoption of Agricultural Techniques

An average 48 percent of members (3052 farmers) receiving significant amounts of assistance are using improved agricultural techniques suggested by LDI.

Criteria	Fianarantsoa	Mahajanga	Moramanga	Total
Number of farmers using improved techniques	1424, i.e. 49%	366, i.e. 33%	1262, i.e. 55%	3052, i.e. 48 %
Number of farmers engaged in conservation and development activities	1740, i.e. 60%	191, i.e. 17%	1996, i.e. 87 %	3927, i.e. 62%

Rural Credit

A total of 258 millions Fmg of credit to production was granted to 728 members in 2000/2001. The reimbursement rate of amounts due is 66 percent. An amount of 168 millions Fmg was granted to 821 members for the year 2001/2002. In Mahajanga, credit operations for Kolo Harena members will be taken

over by Entreprendre à Madagascar, under the supervision and with technical assistance from the NGO GREEN.

REGION	1999/2000					2000/2001					2001/2002				
	Amount allocated	Amount due	beneficiaries	Reimbursement	%	Amount allocated	Amount due	beneficiaries	Reimbursement	%	Amount allocated	Amount due	beneficiaries	Reimbursement	%
FIA	14,237,075	2,190	57	14,237,075	100%	101,020,240	101,020,040	267	82,264,748	81%	67,351,300	10,669,700	167	6,854,150	10%
MOR	133,219,040	133,219,040	193	93,683,932	70%	114,642,300	114,642,300	235	54,511,674	48%	63,029,650		548	1,678,160	2%
MAH						42,391,250	42,391,250	226	38,683,128	91%	37,457,500		106		
TOTAL	147,456,115	133,221,230	250	107,921,007	81%	258,053,790	233,867,590	728	175,459,550	68%	167,838,450	10,669,700	821	8,532,310	5%

To those credits are added credits in kind of MGF 140 million of which MGF 70 million for Fianarantsoa and MGF 70 million for Moramanga. Hence the credit granted to farmers totals MGF 307 million.

In Moramanga, data on credit have not been updated since OTIV did not submit a report to LDI (resignation of the person in charge with OTIV). Data on credit in the new SZI (Fénérive, Brickaville, Vatamandry) were not sent to the regional office in Moramanga because of communication and transport problems during the period of crisis. GAMACONSULT has conducted the relationship study with financial partners and found out that partners need direct material and financial support to be able to invest in development activities.

In Fianarantsoa, in spite of the crisis, the BOA continues the financing of the down payment on inventories credits for Kolo Harena's community granaries (GCV). This bank consented to release GCV credits in 3 installments to associations confronted with reimbursement difficulties caused by the current crisis. As regards EAM, because of the fuel shortage, LDI and Kolo Harena had to travel to fill the gap and advance in the credit granting process. Some delays were therefore encountered.

In order to start emergency micro-credit activities for Kolo Harena, two sites in Fianarantsoa organized briefing sessions on the system, using the Malagasy version of the law on cooperatives as support material.

Concerning the equipment credit from EAM, the draft project feasibility study was prepared with the regional direction of EAM. A dehuller project for the Miarinarivo site is under review.

The energy credit for the purchase of gas stoves, which was innovated in Mahajanga in association with Entreprendre à Madagascar, involved 999 recipients, for a total loan amount of MGF 100 million. The current reimbursement rate is 96 percent. The second operation will take place as soon as possible.

Farmer to Farmer Approach

The "Farmer to Farmer" training approach is among the approaches recommended for the continuation of activities upon completion of the LDI Program. The *paysans vulgarisateurs* (peasant extension agents) are selected among pilot farmers considered most efficient in their specialization and able to communicate with the KH. They will be trained in pedagogy and communication in order to provide them with trainer's qualifications. The *paysans vulgarisateurs* for technical vulgarization and *paysans animateurs* (peasant socio-organizers) for the socio-organizational aspect will eventually be paid by recipients and the Federation according to terms and conditions to be defined by the latter. To date, 329 *paysans vulgarisateurs* and *paysans animateurs* are operational, of which 166 work in Fianarantsoa, 95 in Moramanga and 68 in Mahajanga.



An example of the demonstration instalment which is a tool for farmer-to-farmer approach

Agricultural Intensification Manual

The Agricultural Intensification Manual was published this year. This manual is a reference document aimed at diffusing and expanding LDI approaches. It is directed to field agents and LDI partners responsible for supervising KH farmers in the domain of agricultural intensification and also in their relationships with financial and commercial partners. This manual is the result of teamwork, and was endorsed by LDI staff.

2.1.2 Community-Based Natural Resources Management

The “Participatory Forest Management” of the LDI Program became a reality this year with the signature by three local communities of participatory forest resource management contracts (GCF). Two contracts concern the *zetra*, a specific ecosystem bordering the Lac Alaotra, which is composed of plant species intensively harvested in the region, including bamboos. The *zetra* also serves as shelter for valuable wildlife species; spawning ground for several bird and fish species; and habitat for the famous endemic lemur species known as the *bandro*. As such, 456 ha of this forest type are under the protection of 91 farmers, as specified below:

- Belempona's *zetra* over 314.9 ha involving 41 farmers, signed on 19 October 2001
- Ambohimiarina's *zetra* over 141.7ha involving 50 members and signed the same day.

In Fianarantsoa, 430 ha of forests in Alatsinainy lalamarina were placed under local communities' protection. Capacity-building among COBA members and management contract implementation started in January 2002. Because of the crisis, the contract was signed only in July 2002.

In addition, the management of Belalitra forest (53 ha) in Ankijabe Mahajanga was placed under the protection of the 90 local-based community in Belalitra. The signature of the GCF took place in May 2002.

Also, the local communities in collaboration with the Ministry of Water and Forests developed 9 management transfer projects –5 for Fianarantsoa and 4 for Moramanga –. LDI's zones of intervention have been ready for the signature of GCF since end November 2001. However, because of the situation prevailing in the country long before the presidential election in December 2001, the signature, which is the officialization of the management transfer, has not taken place yet.

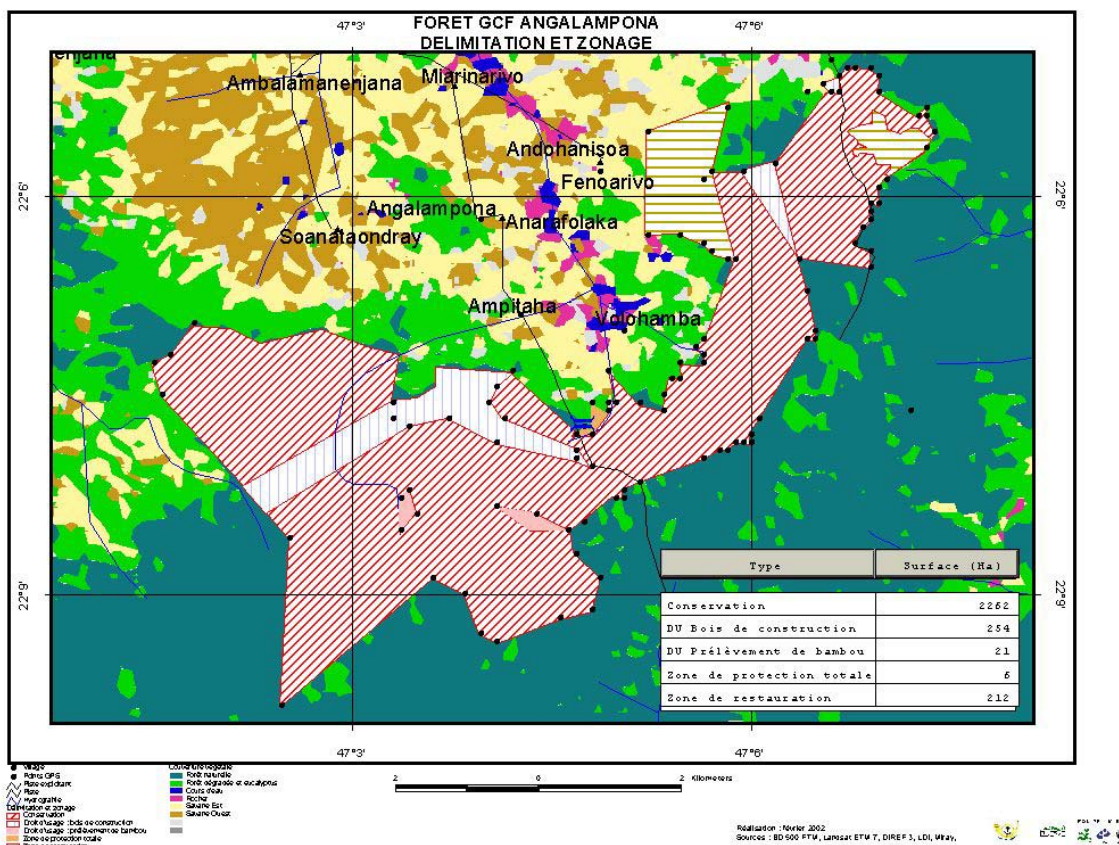
Finally, the preparation of 2 new projects is underway.

The GCF contracts signed are being implemented. The actions realized by the local community concern the socio-organizational aspect, and are aimed at further consolidating or adding new component elements in the GCF dossier. They also concern the provision of details on the delineation of forest lot covered by the transfer as well as the materialization of such boundaries. The first semester of the year 2002 correspond to the period when water levels rise particularly in the region of Alaotra, therefore no activity was practiced in the *zetra* as every year.

The LDI staff, with the support of the regional forest service and junior experts assigned to the GCRN component, delineated the surfaces transferred using GPS, in order to establish GCF maps as well as the division into lots of management plans.

The following table summarizes the contracts signed so far:

Region	Names	Type of Natural Resource	Surface	Number of COBA members	Date of signature
Mahajanga	Anosimijoro	Classified Primary Forest	572 ha))
			245 ha) 127) 14/12/00
			922 ha))
	Marosely		680 ha	58	27/06/01
	Belalitra		56 ha	90	29/05/02
Fianarantsoa	Miarinarivo	Classified Primary Forest	2,755 ha	700	30/06/01
	Alatsinainy lalamarina		434 ha	121	15/07/02
Moramanga	Ambohimiarina	Zetra, Wetland zones	142 ha	50	19/10/01
	Belempona		315 ha	41	19/10/01
Total contracts signed			6.121 ha	1122	



2.1.3 Environmental Education and Communication

The environmental education and communication component is a transversal initiative integrated systematically in each technical component of the LDI program. As such, the support materials as well as communication tools produced are designed to follow-up LDI regular and integrated activities and inform about LDI activities.

At the national level, **achievement posters** were developed for each technical component of the LDI Program. These achievement boards were designed for the program's private and public partners during LDI events (visit of the chairman of Chemonics International; conference of donors); the media ; and the various presentations on LDI after 30-month of field intervention.

At the local and regional level, LDI produced **posters** on the following technical themes:

- *The ecological ginger*: 2 four-color posters (40 x 60 cm) to promote the production of ecological ginger among Kolo Harena members in order to increase yields and revenues while protecting the environment.
- *The participatory forest management* (GCF) whose design and production are underway.

The edition of "**Gazety Kolo Harena**" is going on smoothly with the active participation of Kolo Harena members in the 3 LDI zones of intervention. The second issued was published in October 2001. Articles addressed several topics including:

- The experience of Kolo Harena farmers in Marosely Mahajanga regarding the transfer of management of the Marosely forest in Port-Bergé to the COBA;
- The post-training experience of farmers in Tsararano Mahajanga in the management of the agricultural supply center;
- Bee-keeping practices of Kolo Harena farmers in Ialamarina Fianarantsoa.

It should be noted that the private sector found the journal interesting and put in advertisements to inform readers on their demand for farm products, and medicinal and aromatic plants, as was the case for Homéopharma and Pronabio.

Feedback on the first issue revealed the interest of non-Kolo Harena farmers who asked for the journal and requested further information. It also enabled us to review the contents of this *gazety* for the next issues.

The radio station **Radio Akon'Ambanivolo** in Beforona started again on more solid foundations after training of radio announcers and awareness raising among KH through a participatory approach. As a consequence, the Federation Tongalaza in Beforona is gradually taking in hand this radio station with the association FITARA. This represents one step further towards autonomy and sustainability. For the time being, the radio station Akon'Ambanivolo produces audiocassettes and broadcasts on technical topics on agricultural intensification activities, environmental education and health in collaboration with Voahary Salama, in an 8 km radius. The radio station constitutes a means for the sustainable development of Kolo Harena associations and contributes to the achievement of economic and environmental goals defined by LDI.

The **28-page brochure on LDI**, updated and better illustrated, was published to disseminate LDI approach, philosophy and achievements. It is designed for LDI partners, donors and support institutions. The **website** of LDI is also being updated to facilitate the broad diffusion of information on LDI, in particular LDI approaches, achievements and reports, the "Gazety Kolo Harena" and newsletters.

LDI set up 4 **village cultural centers** in the region of Alaotra to promote villagers' access to information and documentation.

As regards the **marketing plan for the Kolo Harena movement**, the agency in charge of its development completed field data collection. The plan aims at providing information about and promoting Kolo Harena on all levels (local, regional and national) in order to increase the number of members, and to make associative structures as well as development and environment protection actions sustainable.

This component provided support to the Federation of Kolo Harena Hanitriniala in Ambatovy Moramanga during the preparation of the **fair**, which marked the federation's first birthday. It was an opportunity for the federation to show its achievements and define its future goals.

2.1.4 Promotion of Conservation Enterprises

- Support activities were more numerous during the first semester compared to the second semester because of the impacts of the political crisis associated with the presidential elections in December 2001. Thus, in October 2001, LDI provided assistance to the participation of the PRONABIO association in the Natural Products Expo in Washington by supporting the costs related to the participation of six members (Homéopharma, Expam, Parapharma, Trimeta, Plantations de Mondésir, Label CBD).
- The signature of the agreement between LDI, PRONABIO and SOFRIMEX agency, which represents the association in Durban is a new start of the association in the development of the South African market. With the assistance of the technical secretariat of PRONABIO, the agency's role is to forward to PRONABIO members orders from South African clients and to collect natural products offers from Madagascar.
- The eco-label "Natural Products of Madagascar" is a natural next step in LDI support to the promotion of agribusiness products of Madagascar. The objective is to expand into new markets including the United States and South Africa. The project is executed in collaboration with Rutgers University (USA), and also calls upon local skills such as laboratory analysis and the efforts of exporters themselves. The scope of work is being finalized for the first products selected, and the label as well as the laboratories analyses have been identified.
- We have completed the first version of a film promoting ecotourism in Madagascar, directed to both national and international audience. This film needs one more edit before wide scale distribution.

Support to EFE

We responded to 17 new requests for assistance received during this year:

- Madakoho for the production of ecological ginger in the area of Moramanga,
- FIMPIMO-GEMO for breeding and organic agriculture, concerning the training at LDI Moramanga,
- Association Amis 2 Lacs for the development of an operation plan for a tourist site in Manambato,
- GAIM for the production of essential oils in Moramanga,
- Soalandy for sericulture in the area of Ambatovy,
- Biosave for clove leaf essential oil in the area of Fénéry-Est,

- Kaoperativa Mpiompilandy Lac Alaotra for sericulture in the area of Antanandava,
- Plantations Lamahoana et Beando for model plantations in the area of Moramanga,
- L'Eleveur SA for the production of onions in the area of Ambatovy,
- Fanalamanga for forestry development in Moramanga,
- Label CBD for the promotion of ginger essential oil in Moramanga,
- Volasoa for the production of clove essential oil in the area of Fénérive-Est,
- Homéopharma for an ecotourism site in Ambila and a project of extension of exploitation,
- Ramanandraibe Export for an agro-industrial unit in the area of Manakara,
- Association Madagascar Magic Fingers, operating in the craft industry and contributing to provide farmers with additional income sources by supplying raw materials, for the development of an action plan.
- Tsara Aromatika for the production of geranium essential oil in Ambatondrazaka,
- PROIMPEX for a project of fir tree resin exploitation in Moramanga.

We responded to 89 requests for assistance from EFE including:

- Feasibility study (25)
- Product promotion trip (2)
- Research (8)
- Environmental impact assessment (3)
- APD rehabilitation of irrigation system (1)
- Architectural study of ecolodge (3)
- Market study (13)
- Financial support by the FIEFE (26 requests received)
- Request for *expert junior* assistance (3)

Currently, 17 EFE in Moramanga, 7 in Mahajanga and 4 in Fianarantsoa established market relations with 2165 Kolo Harena farmers (342 in Mahajanga, 1745 in Moramanga and 78 in Fianarantsoa) for the sale of their agricultural products (essential oils, medicinal plants, pygeum, cinnamon, onions, ginger, ...). For instance, the total sales recorded for this year amount to 943 million Fmg for Moramanga.



Steam boiler for essential oil production from fresh ginger

The list of the EFE supported by LDI is provided as an appendix.

Fonds d'Investissement pour les Entreprises Favorables à l'Environnement (FIEFE)

For the year 2001-2002, two new projects were approved for financing under FIEFE:

- The ecotourism project of Lodge Nature in Antsiranana of \$88,889 for the finalization of its investments in the building of ecolodges.
- The project to increase BIOSAVE's essential oil production in the area of Fénérive-Est by developing its production equipment. However, because of the current political events, which make project implementation and monitoring difficult, the releasing of funds was postponed.

A total of approximately \$156,889 was disbursed by the FIEFE including:

- Phael Flor which produces cinnamon leave essential oil in the area of Brickaville, for a contribution of the FIEFE of \$28,000;
- Les Plantations of Mondésir which produces essential oils and spices in Fénérive-Est for \$40,000;
- Nature Lodge in Antsiranana for \$88,889

Currently, one of the projects entered the reimbursement phase of FIEFE loan (Les Plantations de Mondésir).

The Union Commercial Bank (UCB) also ratified the framework-agreement of the FIEFE, thus joining BTM-BOA, BNI-CLM, BMOI and Fiaro (Investco was put into liquidation) as financial institutions participating in the FIEFE mechanism.

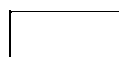
The *junior expert* who was assigned with CEM (savings bank of Madagascar) has been integrated into the company, which further reinforced the collaboration with LDI.

The following tables present FIEFE projects:

Monitoring table for FIEFE projects

Name or Business Name	Region	Sector	Purpose of Investments	Project Amount (kMGF)	Amount Requested (kMGF)	Partner Financial Institutions	Date of Submission of Project to Financial Institutions	Project Status
Phael Flor	MOR	EO	Procurement of production equipment (alembics, warehouses...)	767,474	227,300	BNI-CLM	October 2000	Refinancing of kMGF 181,840 effected
Domaine Nature	FIA	ECO	Establishment of the unit, monitoring and control of works	245,971	197,145	Investco, BNI	September 2000	No response from Investco and BNI-CLM
Mendri	MOR	ECO	Construction of buildings, and procurement of equipment	1,021,509	532,070	BMOI, BTM-BOA	October 2000 (BMOI) and January 2001 (BOA)	Project rejected by BMOI; under review at BTM-BOA
Camp Catta	FIA	ECO	Construction of buildings, and procurement of equipment	1,000,000	260,000	BTM-BOA	February 2001	Under review at BOA
Vatomanga	MOR	IAA	Procurement of production equipment and material (irrigation, ovens...)	983,096	523,589	Investco, BNI-CLM	February 2001	Project rejected by BNI-CLM and Investco
Biosave	MOR	EO	First phase of procurement of production material and equipment, warehouse	362,902	242,902	Investco, BTM-BOA	January 2001 (BOA) and February 2001 (Investco); submitted again in December 2001	Credit releasing by BOA is underway
Ranomaniara	MOR	EO	Procurement of production equipment and material + initial BFR for a new exploitation method of geranium	531,000	285,000	FIARO, BOA	March 2001 (BOA and FIARO)	Project rejected by BOA
Les plantations de mondésir	MOR	EO	Investments in production equipment and material + initial BFR	1,401,500	325,000	INVESTCO	September 2000	Refinancing of kMGF 260,000 effected
Alasoa Ecotourisme	MOR	ECO	Building of a restaurant	506,911	342,411	BNI-CLM, BTM-BOA	-	Project finalized at LDI, promoter's documents awaited
Le dama	MOR	EEEE, MEDP	Investments in production equipment and material + initial BFR	4,000,000	1,000,000	Fiaro	-	Project being amended

Nature Lodge	DIE	ECO	Finalization of investments in material and equipment for the ecolodge	1,686,663	700,000	BNI-CLM		Refinancing of 560,000 kMGF effected by BNI-CLM
Tsara Aromatika	MOR	EO	Extension of a geranium plantation in the Alaotra region	475,840	210,000	BTM-BOA	-	Project under preparation. Amendments needed.
Bio Plus (Cap du Poivrier)	MOR	PEP	Extension of a pepper plantation	1,017,898	525,000	BTM-BOA, BNI-CLM, UCB	-	Project to be submitted to BOA, BNI-CLM, UCB
SPIC	MOR	FRU	Creation of a litchis processing unit in Toamasina	7,123,440	1,000,000	Unknown	-	Project in stand by
Plant sun International	MOR ?	EO	Settlement of procurement of production equipment and material	1,000,000	600,000	Unknown	-	Project not prepared due to lack of feedback from promoter
Exofruimad	MAH	FRU	Creation of a fruit juice production unit	919,172	200,000	BOA	December 2001	Project under review at BOA
Fontenay Resort	DIE	ECO	Building of a luxury ecotourist hotel establishment	2,675,000	500,000	Unknown	-	Project development launched
TOTAL (MGF)				25,718,376	7,670,417			
TOTAL (USD 1 USD =6700 MGF)				3,838,564	1,144,838			



Projects already review or under review at LDI



Projects under identification

EO :
Essential
Oils
ECO :
Ecotourism

ORG : Organic
Agriculture
MEDP : Medicinal
Plants

2.1.4 Local Community Capacity Building

Based on the 3-year experience of the LDI program, in particular in matters of socio-organization, a **Kolo Harena guide** designed for field agents was developed for use as a reference document for all the Program's zones of intervention. A Malagasy version of the guide is also available and might be also be used by both KH and non-KH farmers. The guide is divided into 3 parts dealing with:

- the socio-organizational aspect in rural areas
- the professionalization of rural structures, in particular KH, through their different functions in the domain of agricultural intensification
- the importance of the partnership relation between rural organizations and public or private organizations or institutions operating in rural areas.

In addition, **the exchange between Kolo Harena associations or between Kolo Harena and other rural organizations** reinforced the salient points during this six-month period.

In August 2001, 8 Kolo Harena members in the SZI of Antanandava Moramanga undertook exchange visits to Kolo Harena in the SZI of the Southern Corridor of Fianarantsoa. The experiences of the Betsileo people were useful to Kolo Harena from Antanandava as regards off-season culture; the rehabilitation of *tanety* lands; fish culture and young fish production; management of village community granaries (GCV) ; Kolo Harena way of life and their environment actions.

In October 2001, 5 Kolo Harena members from Moramanga and 3 Kolo Harena members from Mahajanga attended the General Assembly of Rural Organizations in Madagascar, which gathered in the capital 70 rural associations operating throughout the country. The representatives of Kolo Harena took this opportunity to make a short presentation of the Kolo Harena movement. The general meeting, which lasted 3 days, gave birth to the **Coalition Paysanne de Madagascar**, a rural platform of dialogue, proposal, pressure (if needed), and experience sharing for an actual involvement of farmers in rural development. The platform is an important partner for the LDI program; a partner which represents the rural world at the national level.

The number of Kolo Harena farmers supervised by LDI is presented in paragraph 2.1.1 of the Agricultural Intensification.

2.1.5 Counterpart Funds

FCV USAID

PIP 2001

The inscription of FCV for the LDI Program in the PIP 2001 totals three billion Fmg. After reductions put into effect at the request of the "Ministère de l'Aménagement du Territoire et de la Ville" and USAID, aimed at the payment of the CAP road rehabilitation, the reimbursement of the European Union and the contre-audit, the funds available for LDI totaled 2,335 billion Fmg.

These funds were allocated for the following activities: road construction, water systems, irrigation work, anti-erosion work, studies and research, monitoring, oversight and surveillance.

A provisional reception was completed on all the work with the exception of the road rehabilitation in Bekobay Mahajanga and the three bridges in Miarinarivo Fianarantsoa, which will be reported on during 2002.

The following shows the progress of work financed under FCV USAID by region.

Region	N.	Objective	Total in MGF HT	Payment situation ¹	Work Status
ANTSIRANANA	01	APD and DAO for work to supply potable water in Ankarana	44,670,000	100%	
	02	APD and DAO for the rehabilitation of the rural road near the Ankarana National Park	44,627,000	100%	
	04	Rehabilitation of the potable water supply system in Ankarana	320,789,835 ²	95%	
	04'				
	05	Rehabilitation of the potable water supply system in Joffreville	295,156,770	95%	
	10	Control and supervision of the potable water supply system in Joffreville	44,749,000	95%	
	11	Control and supervision of the potable water supply system in Ankarana	44,116,000	95%	
MAHAJANGA	03	Civil engineering work relating to the stabilization of two <i>lavakas</i> in Androtra	101,751,521	95%	Provisional reception
	07	Work in biological protection at two <i>lavakas</i> in Androtra	184,500,000	95%	Provisional reception
	08	Work in rehabilitating a road connecting RN4 and Bekobay	177,795,500	42%	Reported in the PIP 2002
FIANARANTSOA	06	Work in rehabilitating the Faraony Nihaonana road	262,620,850	95%	Provisional reception
	06'	Work related to the Faraony Nihaonana road	51,872,000 ²	100%	Provisional reception
		Rehabilitation of the Miarinarivo bridge	346,947,774	-	Reported in the PIP 2002
	09	Control and overseeing of work rehabilitating the Faraony Nihaonana road	29,992,600	95%	
	12	Work in rehabilitating the road encircling the ZIE Isalo	324, 641,750	86%	Provisional reception
	13	Control of work rehabilitating the road encircling the ZIE Isalo	49,940,000	95%	
Total			2,324,170,600		

¹ The remaining 5% represent the security bond which will be given back to companies at the time of final reception

² Compared to the initial awarding of those markets, additional works were realized for the water supply system in Ankarana and the rehabilitation of the Faraony Nihaonana road. These additional works total MGF 22,298,600 and 51,872,000 respectively.

PIP 2002

Because of the economic and political situation prevailing in Madagascar, the draft program for the use of funds in 2002 could not be presented to the administration. Its preparation will then take place during the month of June 2002.

With regard to work progress, the company titular of the market "Work in rehabilitating a road connecting RN4 and Bekobay" was forced to stop work for force majeure.

FCV JAPAN

PIP 2000

LDI profited from a total of 650 million Fmg worth of Japanese funding which was destined for road rehabilitation project around Isalo National Park in the autonomous province of Fianarantsoa. This sum was divided into a definite installment (350 million) for the year 2000 and a conditional installment (300 million) for the year 2001.

The execution of the work as of 31 January 2001 was estimated at 297,401,259 Fmg divided as follows:

- Lot 1: 160,402,957 Fmg for the rehabilitation of the Ranohira Piscine and Ranohira Namaza roads
- Lot 2: 136,998,302 Fmg for the rehabilitation of the Ranohira - Ranohira Bas road.

For the remaining sum of 352,598,741 Fmg, the Japanese Embassy agreed to its utilization to finalize the work in the framework of PIP 2001.

PIP 2001

For lot 1, the total of the work was 139,606,493 Fmg. Additional work costing 21,167,322 Fmg was necessary, bringing the total for the PIP 2001 to 160,773,815 Fmg.

For lot 2, the contract for the work was initially given to the enterprise Dimby, but the contract was completely terminated by the application of article 39, which stipulates that "the terms of termination are those which are anticipated by the regulations of the current public market". Due to the pressing urgency of the work, a new contract total of 203,661,900 Fmg was awarded to the enterprise ARR, who has had a better performance record than Dimby and already knew the context of the work.

The following shows the status of contracted work financed by the FCV Japan by region:

Region	Market	Objective	Total HT	Payment situation	Work situation
Fianarantsoa	00/01 Lot 1	Completion of the rehabilitation of roads at Ranohira Piscine Ranohira Bas	139 606 493 21 167322 ³	91 %	Provisional reception
	01/01 Lot 2	Rehabilitation of the road at Ranohira – Ranohira Bas	203 661 900		
Total			364 435 715	95%	

PIP 2002

The LDI Program does not have any more budgetary inscriptions on the Japanese FCV line in 2002. The payment of the PIP 2001 balances will be effected at the date of final reception of works.

2.1.6 Monitoring and Evaluation

This year, the LDI monitoring and evaluation team focused its efforts on verifying the following work assumptions for LDI:

- the combination of agricultural intensification, natural resource community management and environmental education activities contributes to the reduction of agricultural lands expansion in priority ecosystems ;
- the sustainable management of natural resources increases commercial profits for EFE ;
- Capacity building among local stakeholders encourages the latter to adopt sustainable practices.

³ Additional works compared with the initial market.

Pressure Reduction in Priority Ecosystems

Based on the methodology of pressure monitoring developed in association with Pact in January 2001, quantitative surveys using geographical information system (GIS) as well as qualitative surveys (MARF) were carried out in the 3 pilot areas selected in order to produce a separate report on *tavy* monitoring.

In short, in the test villages surveyed, namely Andohanisoa (Fianarantsoa), Belalitra Ambalamanga (Mahajanga) and Ambalavero (Moramanga), Kolo Harena farmers no longer practice *tavy*. 30 representatives of 11 Kolo Harena and 18 non-Kolo Harena farmers participated in the study. 21 new *tavy* were created between 1998 and 2001 but Kolo Harena members own none of them.

Kolo Harena farmers no longer practice *tavy* in test villages because:

- They are engaged in improved systems and are motivated by an increase in revenues (38 percent), so they have less free time for other actions;
- The application of *dinas* (by-laws) which govern the members of the associations limited their digressions;
- The existence of participative forest management contracts (GCF) limited the granting of clear-cutting permits and promoted the implementation of forest management plans.

Kolo Harena farmers are motivated to engage in sustainable practices since LDI interventions are rapid, and the opportunity of market relations with private operators is effective (over MGF 500 million of product sales since June 2001).

Nevertheless, the impacts of reducing agricultural lands encroaching on priority ecosystems are still limited for two main reasons: (1) Kolo Harena farmers are still a minority in the SZI, at less than 10 percent of the total population; (2) farmers of the most disadvantaged social strata were naturally excluded from Kolo Harena associations because they do not respect the commitment to protect the environment as well as the joint and several guarantee.

The next step will be to refine the methodology of pressure monitoring in the SZI. The work in the field will begin in July 2002.

Increase in Commercial Profits Resulting from the Sustainable Management of Natural Resources

Data collection from EFE showed that :

- 8 EFE invested up to \$1,341,000 in the ecotourism, essential oils, and fruit and vegetables sectors
- over 2170 jobs were created by the extension and new investments realized by the EFE
- to date, 3095 Kolo Harena farmers have established market relations with EFE

Capacity-Building of Local Stakeholders to Adopt Sustainable Practices

On the basis of number of farmers supervised by LDI in June 2001, 70 percent of farmers who received training and technical supervision adopted improved systems, which increased their agricultural yields and their household revenues.

For the crop year 2001-2002, LDI works in more than 320 villages where approximately 15,668 farmers are supervised.

Creation of the Kolo Harena and EFE Database

The ACCESS data acquisition software is operational. The acquisition of cumulated data was completed for the regions. The software was designed to generate systematically the annual situation of LDI indicators. It also makes it possible to compare LDI achievements with the geographical information system, and thus visualize data per SZI or per region. The software can generate LDI contractual indicators ; yet, we had to continue using the usual indicator format since the acquisition of data prior to 2001 was not done in time. The next step, as soon as all past data are acquired, will be to compare this database with the *tavy* geographical location for the spatial analysis.

2.1.7 LDI Partnership with Institutions and Organizations

MGHC, JSI and Voahary Salama

LDI and JSI were the first to start integrated health-population-environment activities, and gave birth to the project Madagascar Green Health Communities (MGHC). The project MGHC started with a \$2 million grant to JSI Research & Training Institute, Inc. from the Packard Foundation funds, and is expected to end in 2005. The financing for the first year representing \$860,000 is already transferred. The health-population-environment work is a pilot experiment strongly supported by the USAID Madagascar mission to launch initiatives to reduce demographic pressures on the forest corridor through integrated activities in agricultural intensification, community resource management, reproductive health, and maternal and child health care. Through a \$2 million grant to JSI from the Packard Foundation, both LDI and JSI have launched a series of "fast-track" health and agricultural intensification activities in the Tolongoina and Ikongo sites in Fianarantsoa and in Beforona Moramanga.



LDI field agents took part in cross-training sessions organized by health partners (JSI, SAF-FJKM) designed to provide them with basic health, nutrition and family planning information that they can share with Kolo Harena farmers. The goal was to ensure that Kolo Harena learn about basic family planning methods. With a grant obtained from Packard Foundation, JSI, LDI through the Voahary Salama program are carrying out test population-environment initiatives (linking potable water, family planning, and child health with agricultural intensification and natural resources management) in communities along the eastern side of the forest corridor.

LDI also provided support to MGHC in the development of its workplan through 2005, and the recruitment of technical and administrative support staff.

ANGAP

In Antsiranana, ANGAP and LDI work together to provide technical assistance and socio-organization to the water users' associations in Joffreville and Ankarana. This action is aimed at putting in place a perennial structure to manage the rehabilitated infrastructure for drinking water supply.

In Isalo, ANGAP started the maintenance of roads rehabilitated by LDI with financing from the Japanese FCV in Ranohira. ANGAP will receive technical training from the company during the period of guarantee, and will assure the biological protection of these roads by planting vetiver and indigenous plants. In addition, LDI assigned one junior expert at ANGAP to supervise the community of Isalo, in view of the development of Isalo following the installation of the "Zone d'Investissement Ecotouristique" (ZIE) around the Isalo National Park; however the modalities of collaboration need to be reviewed.

PACT Madagascar

PACT provided support in the development of the methodology of pressure monitoring in the pilot areas; and in the collection, analysis and generation of quantitative results on *tavy* in the 3 test villages. PACT coordinated the field visits of 3 technical support staff in charge of data collection; the comparison of the *tavy* database with the geographical information system; and the preparation of reports.

PACT also continues to provide support in the development of maps showing LDI achievements.

Ministère des Eaux et Forêts

Through the Regional Direction of Water and Forests, LDI was able to proceed to the signature of 8 participative forest management contracts. Water and Forests agents received training at the same time as LDI agents. They are cooperative and are now engaged in the process of forest management transfer.

The Autonomous Province of Toamasina

The protocol of agreement between LDI and the autonomous province of Toamasina sets out the framework of partnership and the modalities of collaboration in order to lay the foundation of a successful cooperation in common zones of intervention in the province of Toamasina. This collaboration is including the rehabilitation of infrastructures of production in certain areas in the autonomous province of Toamasina. The first installment of the contribution of the autonomous province of Toamasina of 100 million Fmg was paid in October 2001. In spite of the crisis prevailing this year, the 2nd installment of 100 million Fmg was transferred to the LDI account. Construction works for the 4 agricultural supply center in Brickaville, Vatomandry, Fenerive Est and Lovoka started and are expected to be completed within 2 months.

Projet de Soutien au Développement Rural

Kolo Harena associations in Fianarantsoa and Moramanga have submitted funding request for livestock and agricultural project to PSDR. In Toamasina, 18 among 22 projects accepted and approved are from Kolo Harena associations. In Fianarantsoa, Kolo Harena associations have only submitted their projects on June 2002.

2.1.8 Training and Research

LDI Scholarship Program

All LDI Program grantees who studied in the United States are back in Madagascar and joined their respective employers, except for Nosy Ramamonjisoa who continues her training course with IRG in the USA. She will complete her course at the end of July and will be returning in August.

Students and LDI staff capacity building

To date, 56 students as well as national and foreign researchers worked in the CDIA of Beforona, Miadana or in LDI zones as interns in view of the preparation of thesis or the realization of research to obtain their diplomas. LDI provides logistics (accommodation and paying restaurant) at the CDIA but also contributes financially to the realization of research. So far, LDI disbursed MGF 332 million Fmg for students-searchers to conduct soil analyses; to buy the supplies or inputs necessary to their research, in short to complete the research and the preparation of the final report. Since June 2001, a lump sum of MGF 1,500,000 is granted to Malagasy students for the realization of their research. Research topics are interesting both for LDI and the students.

Currently, 3 students from ESSA-Antananarivo are doing their thesis internship to obtain the diploma of agricultural engineer sciences at the CDIA of Beforona. A short summary of their research is provided as an appendix.

The list of students/searchers who worked for LDI during the course of their studies as well as their respective research theme is provided as an appendix.

2.1.9 Finances and Administration

Intervention Fund

Management of the Intervention Fund

The most significant facts for the Intervention Fund during this period include:

- a. Actions undertaken to face budget constraints;
- b. The closure of the Regional Office in Majunga ;
- c. The launching of fast track activities under the MGHC project.

1. Actions undertaken to face budget constraints:

The amount allocated to the Intervention Fund this year – in totality and per region – is practically the same in comparison with previous year allocation (\$ 970,000). Yet, the bulk of this amount was already obligated for contractual obligations in the previous years. As a consequence, the funds remaining were insufficient to start new activities.

For an optimal management of these financial resources and to respect budget allotments, we had to set priority for activities to be financed, and set up a more efficient monitoring system for all the activities financed by the Intervention Fund.

a – Priority-setting for activities to be financed :

A census and an evaluation of all contractual obligations for each region were undertaken in close association with the technicians in charge of each component. This exercise made it possible to review and adjust the objectives of contractual obligations, if not to proceed directly - in certain cases - to termination in case of nonperformance by the partner/subcontractor.

As a result, promising ongoing activities were consolidated, and new funds were released to finance new activities and initiate new subcontracts.

b- Establishment of a Database :

A database was designed and established for more efficient monitoring of activities financed by the Intervention Fund, and also to satisfy more rapidly the information needs of technicians, in particular as regards budget availability.

The database includes all the activities financed by the Intervention Fund (regular activities and activities financed by the cyclone recovery funds). In all, more than 700 contractual dossiers (including 233 subcontracts and 16 grant agreements) are available in the database.

The establishment of the database required a test period which lasted a few months, during which the advantages and limitations of the software were assessed. The database in its current version is operational, and is managed by the IF Unit in Antananarivo. However, it was recommended to use a parallel monitoring system for more assurance and reliability.

Now, with an update of the current version of the database management software, the next step will be to extend its use to the Regional Offices in Moramanga and Fianarantsoa, in permanent connection with the version of the IF Unit in Antananarivo.

2. Closure of the Regional Office in Majunga :

This period is also marked on the one hand by the closure of the Regional Office in Majunga, and on the other hand by the launching of activities through the NGO Green which took over the LDI Program in this region.

Consequently, with regard to the Regional Office in Majunga, no new subcontract was initiated and we proceeded to the termination of subcontracts whose deliverables were not provided within the deadlines, and which were considered to be no longer relevant.

In parallel, the first contract - for a 6-month period - with the NGO Green, was signed in January 2002.

3. Launching of Fast Track Activities under the MGHC Project :

The grant agreement between JSI, Research and Institute Training, Inc., Voahary Salama and the LDI Program was signed in February 2002. Upon recommendation of the Executive Committee of the MGHC project, fast track activities which were initially planned to last 6 months will be rather spread out over one year considering their volume.

Grant management procedures are similar to those applicable to the LDI Program. A Manager was recruited to strengthen the IF Unit and to do the accounting related to the grant.

Achievements :

I. Contracts and grant agreements signed, completed and terminated :

I.1. During Year 4 :

A total of 28 subcontracts and 2 grant agreements were signed. In addition, 19 subcontracts and 1 grant agreement were terminated because of budget constraints and the closure of the Regional Office in Majunga.

The following table shows the number of new subcontracts and grant agreements signed, fully completed or terminated during the year.

***Number of subcontracts and grant agreements signed, fully completed and terminated during
Year 4
(Regular activities)***

REGION	CONTRACT			GRANTS		
	Signed	Completed	Terminated	Signed	Completed	Terminated
MORAMANGA	8	18	2			
FIANARANTSOA	12	19	2			
MAHAJANGA		4	13			1
DIEGO	1	1	1			
ANTANANARIVO	4	1				
CONFONDUE	3	8	1	2		
GENERAL TOTAL	28	51	19	2	0	1

The total amount of the 28 new subcontracts signed during the period represents \$ 252,372, against \$ 125,000 for grant agreements.
(\$1= MGF 6,300 in the 1st semester and \$ 1 = MGF6,700 in the 2nd semester).

I.2. Since the beginning of LDI Program

Approximately 150 subcontracts and 16 grant agreements were signed under the Intervention Fund (regular activities) since the beginning of LDI Program. Details are presented in the following table.

***Number of subcontracts and grant agreements signed, fully completed and terminated since the
beginning of LDI Program
(Regular activities)***

REGION	CONTRACT			GRANTS		
	Signed	Completed	Terminated	Signed	Completed	Terminated
MORAMANGA	37	29	2	2		
FIANARANTSOA	57	46	3	6	3	3
MAHAJANGA	29	14	15	2	1	1
DIEGO	10	4	2	0		
ANTANANARIVO	9	3	0	0		
CONFONDUE	7	5	1	6		

II. Payments Effected :

The following table shows the payments effected during the semester. The reference budget is the budget provided in the Workplan approved by USAID. The obligated amounts correspond to the cumulated values of signed contractual documents (subcontracts, purchase orders, etc.).

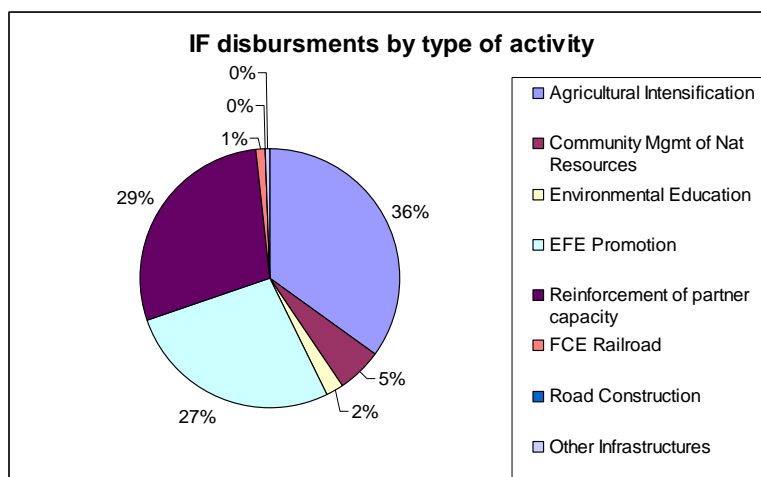
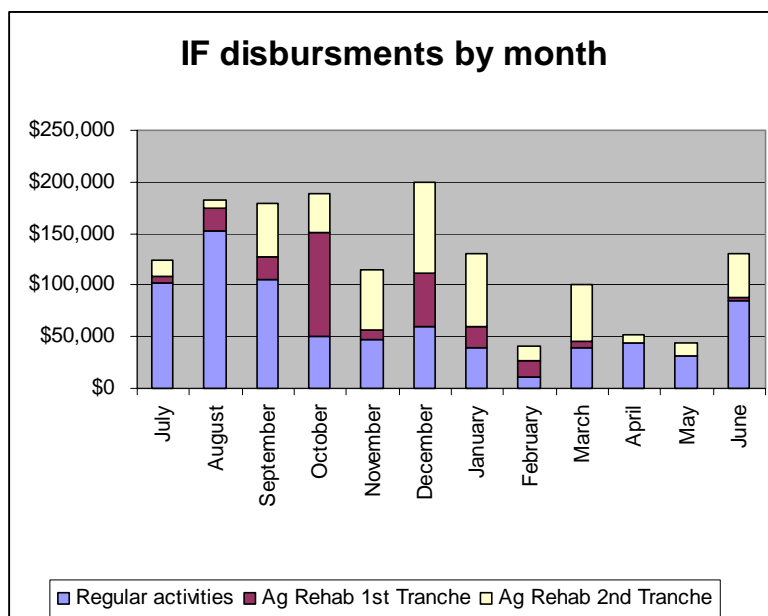
SUMMARY
INTERVENTION FUND DISBURSMENTS TRACKER
 July 2001- June 2002

			BUDGET CATEGORIES											TOTAL
			REGULAR BUDGET					USAID FCV			Japanese FCV			
			Technical Assistance	Credit	Direct Material support	Research	Total	Technical Assistance	Direct Material Support	Total	Technical Assistance	Direct Material Support	Total	
ACTIVITIES	Agricultural Intervention	Budgeted	\$253,881	\$65,378	\$28,658	\$28,822	\$376,739							\$376,739
		Obligated	\$204,545	\$60,610	\$68,686	\$42,750	\$376,590							\$376,590
		Spent	\$161,639	\$18,100	\$58,684	\$41,395	\$279,818	\$0	\$0	\$0	\$0	\$0	\$0	\$279,818
	Community Mgmt of Nat. Resources	Budgeted	\$62,106	\$0	\$8,380	\$190	\$70,676							\$70,676
		Obligated	\$44,583	\$0	\$5,448	\$441	\$50,472							\$50,472
		Spent	\$36,749	\$0	\$5,449	\$440	\$42,638	\$0	\$0	\$0	\$0	\$0	\$0	\$42,638
	Environmental Education	Budgeted	\$31,362	\$0	\$15,277	\$0	\$46,639							\$46,639
		Obligated	\$25,509	\$0	\$7,121	\$0	\$32,629							\$32,629
		Spent	\$14,327	\$0	\$4,494	\$0	\$18,821	\$0	\$0	\$0	\$0	\$0	\$0	\$18,821
	EFE Promotion	Budgeted	\$122,367	\$170,805	\$17,898	\$0	\$311,070							\$311,070
		Obligated	\$122,877	\$134,405	\$29,368	\$304	\$286,955							\$286,955
		Spent	\$97,335	\$93,470	\$22,340	\$298	\$213,443	\$0	\$0	\$0	\$0	\$0	\$0	\$213,443
	Reinforcement of partnership capacity	Budgeted	\$236,705	\$0	\$694	\$0	\$237,399							\$237,399
		Obligated	\$267,409	\$0	\$26,122	\$0	\$293,531							\$293,531
		Spent	\$214,427	\$0	\$15,542	\$0	\$229,968	\$0	\$0	\$0	\$0	\$0	\$0	\$229,968
	FCE Railroad	Budgeted	\$9,232	\$0	\$0	\$0	\$9,232							\$9,232
		Obligated	\$9,232				\$9,232							\$9,232
		Spent	\$8,875	\$0	\$0	\$0	\$8,875	\$0	\$0	\$0	\$0	\$0	\$0	\$8,875
	Road Construction	Budgeted	\$0	\$0	\$0	\$0	\$0	\$19,771	\$184,445	\$204,217	\$0	\$55,556	\$55,556	\$259,772
		Obligated						\$19,771	\$129,671	\$149,443	\$0	\$57,847	\$57,847	\$207,290
		Spent	\$0	\$0	\$0	\$0	\$0	\$19,137	\$103,910	\$123,047	\$0	\$53,826	\$53,826	\$176,873
	Other Infrastructures	Budgeted	\$8,435	\$0	\$0	\$0	\$8,435	\$21,196	\$139,667	\$160,863	\$0	\$0	\$0	\$169,298
		Obligated	\$4,534	\$0	\$0	\$0	\$4,534	\$21,196	\$143,206	\$164,402	\$0	\$0	\$0	\$168,936
		Spent	\$3,450	\$0	\$0	\$0	\$3,450	\$20,491	\$136,223	\$156,713	\$0	\$0	\$0	\$160,164
TOTAL		Budgeted	\$724,088	\$236,183	\$70,907	\$29,012	\$1,060,191	\$40,967	\$324,112	\$365,079	\$0	\$55,556	\$55,556	\$1,480,826
		Obligated	\$678,688	\$195,016	\$136,746	\$43,494	\$1,053,943	\$40,967	\$272,877	\$313,845	\$0	\$57,847	\$57,847	\$1,425,635
		Spent	\$536,801	\$111,570	\$106,510	\$42,134	\$797,014	\$39,628	\$240,133	\$279,760	\$0	\$53,826	\$53,826	\$1,130,601

III. Expenditure Analysis :

Disbursement rate :

Cyclone recovery activities included, disbursements made under the Intervention Fund declined from an average \$187,000 per month in Year 3 to an average \$ 124,000 per month this year. This decline affected both Regular activities and Cyclon recovery activities and is particularly noticed during the second semester. Effectively, on the level of the Intervention Fund, the impacts of the political crisis were felt through a significant decline in the disbursement rate, which is mainly due to the impossibility by the subcontractors to provide their deliverables.

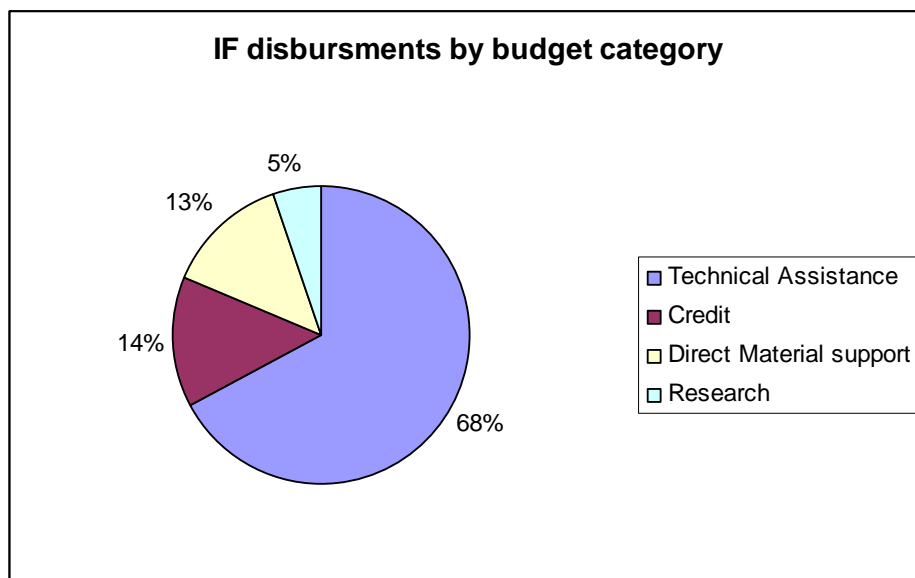


Expenditures per type of activity :

The division of expenditure by activity type shows continuity with the previous years. Agricultural Intensification is still the activity on which the program spends the most. However, in comparison with the previous year, there was increased spending of 10% on EFE against a decrease noticed on Reinforcement of partners capacity activities.

Expenditures per budget category :

Following Technical Assistance, which accounts for 68 percent of effective expenditures, Credit and Direct Material Support come second as the most used budget lines. On the other hand, compared to the previous year, there is an effective decline of more than 10% for Research expenditures.



2.1.7 Administration

The end of December was the close out of Mahajanga office. Personnel from the LDI Mahajanga office created ONG Green, which will continue some of LDI activities. In order for the NGO to get off to a good start, USAID has accepted that most of the office equipment and furniture remain with ONG GREEN under the responsibility of LDI. At the end of our contract, steps will be taken by LDI and USAID either to have the equipment and furniture returned back to the warehouse or officially transferred to ONG GREEN.

An Emergency Action Plan (EAP) was prepared by Chemonics projects in Madagascar, during the political crisis. This has been helpful especially when our regional director's apartment in Fianarantsoa burned, we gave them necessary support until the evacuation plan was put in place by the US Embassy. Evacuation of our American families was coordinated with the Embassy.

Our EAP identified secure locations in regional offices where valuable equipment has been moved, the number of guards was increased. Project vehicles were parked in discrete and safe locations.

Due to the shortage of fuel and other products, the administrative staff of LDI, in Antananarivo as well in Fianarantsoa and Moramanga, spent more than half of their time trying to resolve logistical issues. Because of their high motivation and despite the absence of our regional directors, all of our offices remained open and no staff was laid off. Activities were continued at almost normal level except for Fenerive Est where political/ethnic pressure was more significant than at other places and for several weeks, our staff had to work at the office instead of going out to the field.

During the crisis, LDI has been asked by USAID to take the lead on fuel distribution to all of the implementing partners which we did 4 times.

2.1.8 Value Added Tax (VAT) and Import Taxes and Duties (DTI)

One administrative assistant was recruited to work on VAT and DTI payment due for the 3 USAID projects executed by Chemonics International (LDI, FCER and ReCAP). The following table summarizes the status of payment during the year 2001.

Sub-paragraph	TVA			DTI		
Financing Group A (State-State)	Payment credit	Credit consumed	Balance	Payment credit	Credit consumed	Balance
20172 Water, Electricity, Telephone	120,000,000	5,681,676	114,318,324			
20173 Supplies and Services	140,000,000	298,758,002	-158,758,002			
20175 Maintenance and Repair	140,000,000	44,996,239	95,003,761			
21610 Technical Equipment	540,000,000	112,973,420	427,026,580	50,000,000	909,824,449	-859,824,449
21720 Vehicles				100,000,000	45,970,578	54,029,422
Financing Group B (FCV)						
21410 Road	100,000,000	317,061,857	-217,061,857			
21240 Irrigation Works	600,000,000	59,839,070	540,160,930			
Total	1,640,000,000	839,310,264	800,689,736	150,000,000	955,795,027	-805,795,027

It should be noted that a credit readjustment will be necessary in view of overexpenditures on some budget lines ; however the regularization by a note of presentation will be realized between the Ministry of the Environment and the Ministry of Plan. LDI works on the global credit arrangement granted totaling MGF 13,762,000,000.

The regularization of VAT and DTI payment for year 2002 should wait the promulgation and publication of the Finance Law 2002.

3. Antsiranana Region

3.1 Principal Activities undertaken in Antsiranana

a) Support to the development of the two ZIE and peripheral zones

To improve the well being of the population living around the two ZIE's, LDI has invested 700 millions Fmg from the counterpart fund to rehabilitate the water supply system in Joffreville and to install a new one in Ankarana. On the other hand, users associations have been created to assure long term maintenance of these systems.

b) A touristic Guide for the promotion of the region

Through financial and technical support of LDI, the ETN association has elaborated a beautiful touristic guide on Antsiranana region to be on sale for only 60,000 Fmg. This guide will help to promote the region in a large scale for a great impact. The benefits collected from the sale of this guide will contribute to the financial sustainability of the association.

c) Assistance for investors to develop ecolodges and other activities related to ecotourism

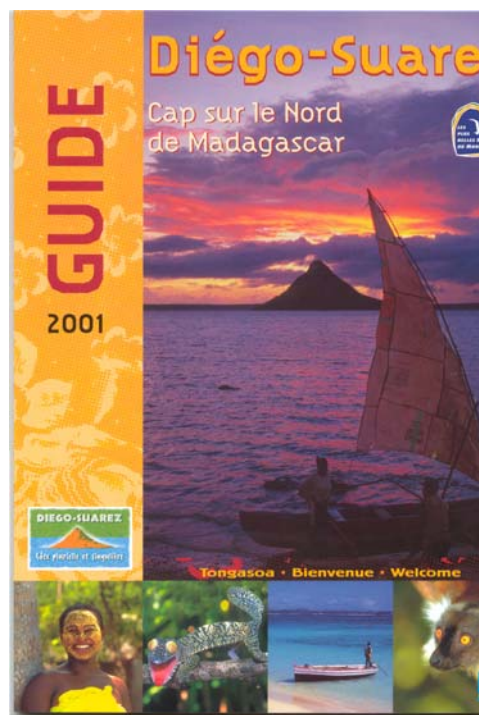
An amount of \$ 86,000 has been released through the FIEFE (Fonds d'Investissement pour les Entreprises Favorables à l'Environnement) for the MDA Nature Lodge located in Joffreville to finalize the construction of this ecolodge. More over, technical support was given to the Fontenay Resort in Joffreville to prepare financial document for the FIEFE credit. The Fontenay Resort is a potential project for a high category ecolodge equivalent to 4 stars hotel service.

d) Development of basic lodges by Village association

Upon construction of the two basic lodges in Andrafiabe, Ankarana, a protocol agreement has been established between the village association, « Ankarana Mandroso », the ETN association and LDI to promote the project through ETN technical support. Unfortunately, this project is now on pending due to the catastrophic reduction of ecotourism activities in national level.

e) Education in the new concept of Ecotourism

A film on Ecotourism in Madagascar is on process to be finished by end of *June*. This product is essentially focused on the potentialities of Madagascar in terms of ecotourism. It has a principal objective to invite tourists as well as investors to come to Madagascar. The film will also try to present the main aspects of real ecotourism, as it is a new concept in Madagascar.



3.2 Accomplishments July – December 2001

Indicators 2001 - 2002	July 2001 – June 2002 accomplishments	Observations
Various commercial contracts are established and undertaken between the local private operators through ETN association and the villagers Association of Ankarana to promote the two basics lodges.	The first step that consists of elaborating a protocol agreement between the 2 associations has been done.	Commercial contracts with local operators could not be established due to the reduction of ecotourism activities caused by the actual crisis.
1 Ecolodge established in Joffreville or Ankarana		The two potential investments in Joffreville have difficulties to finalize their project due to the crisis. They all expect to LDI technical and financial supports.
Technical assistance to rehabilitate the water systems in Joffreville and in Ankarana	Principal works for Ankarana water system supply are done.	The water system supply of Joffreville needs complementary works due principally to cyclone devastation.

4. Fianarantsoa region

The LDI Fianarantsoa program continued to make significant advancements this year in contributing with its many partner organizations to the conservation and sustainable management of the Ranomafana – Andringitra forest corridor through agricultural intensification, conservation enterprise, community resource management, environmental communication, and capacity building initiatives. Despite the political and economic crisis associated with the presidential elections, the Fianarantsoa program met most of its targets though some delays were encountered due to the breakdown in the regional transportation network caused by severe fuel shortages. Even though the regional director Mark Freudenberger returned to the United States in late April under an ordered evacuation, the Fianarantsoa team carried out all program activities with great aplomb, dedication, and efficiency

4.1 Main results

4.1.1 Ecoregional support

The political and economic crisis associated with the presidential elections of December, 2001 severely affected the ecoregional support activities in both negative and positive ways. Leading up to the presidential elections, LDI took great pains to avoid tainting any of its programs by political maneuvering. Public inaugurations of dams, agricultural supply centers, and other achievements were postponed indefinitely in order to reduce the chance of political capture by the various political parties. Relations with regional governance and coordination bodies came to a near halt. During the election campaign and in the months thereafter, regional coordination institutions were not able to meet due to the highly tense environment of the moment. Relations with the Commissaires of the new *Province Autonome* were minimized, meetings were not held by any of the regional coordination bodies, and large-scale assemblies were studiously avoided. LDI Fianarantsoa was forced to keep a very low profile during the difficult period leading up to the overthrow of the regional governor and the replacement by the *Président de la Délégation Spéciale du Faritany (PDS)*.

The LDI Fianarantsoa program nevertheless played an important behind-the-scenes role during this difficult political crisis. The regional staff maintained informal communication with the out-going governor until the very end of his tenure and launched cordial relations with the new PDS upon his ascension. These initiatives protected the security and welfare of staff and equipment. Through an informal coalition with other donor projects, LDI insisted to the authorities on the importance of project acquisition of fuel and laissez-passers needed to carry key development activities. This pressure led to successful acquisition of fuel from both regimes and passes to circulate freely throughout the province. At the time of the arrival of the new PDS, LDI spearheaded an initiative to assure coordination of emergency programs among the donors (World Bank, CRS, JSI, Initércoopération Suisse, the European Union...) through informal meetings among ourselves and more formal presentations to the new regional government. This led to the signature of an official protocol between the US-funded projects to help distribute emergency supplies of medicines, fuel, and other commodities as needed.

The political and economic crisis forced LDI to take special measures to assure the continuation of its programs. At the outset of the crisis, LDI provided detailed information to the government and donor organizations on the impact of the crisis on the economic and food security situation in the province. This information has helped guide future USAID and other donor post-crisis interventions. The terrorist bombings of key road infrastructures in the Fianarantsoa province incited LDI to work with the regional government authorities, the FCE, Pact/ILO, the ADI-FCE, and the OPCI coalition of rural communes to put in place measures to protect the FCE railway tunnels and bridges from sabotage. This led to a massive mobilization of rural populations involved in protecting each and every infrastructure from sabotage. No damage occurred during this most difficult period.

In the midst of these pressures and tensions, LDI continued to work with regional bodies such as the Chamber of Commerce, the World Bank supported GTDR, and the national park service (ANGAP) to find ways to resolve the financial and institutional crises confronted by each institution. These lengthy discussions led to the preparation of detailed dossiers for post-crisis financing and capacity building activities.

As a result of these on-going interactions with LDI's partners in the Fianarantsoa region, the program is well poised to continue to work with regional institutions to help rebuild the economy of the Fianarantsoa province. The trust and confidence built with the private and public sector will certainly contribute to the expected rapid recovery of the Fianarantsoa province!

4.1.2 Agricultural Intensification

The fourth year of LDI Fianarantsoa's component in agricultural intensification was marked primarily by the expansion of efforts to rehabilitate the highly degraded *tanety* lands along the eastern side of the forest corridor. More than 60% of the Kolo Harena farmers involved in upland field crop production adopted improved techniques of upland restoration (i.e.: planting along vetiver contours, intercropping of beans with other field crops, agroforestry of tree crops with annuals). The establishment of nurseries of pepper, cloves, and other tree crops in the Tolongoina and Ikongo zones is contributing to this strategy of restoring denuded hillsides with improved agroforestry systems.

In association with these initiatives to develop new tree crops and associated economies, the involvement of farmers in bee keeping grew rapidly. Along the western side of the forest corridor in the sites of Alatsinainy-lalamarina and the southern corridor, farmers invested resources in managing 466 modern bee hives. Often considered an activity requiring much technical know-how, it is now clear that the Kolo Harena farmers are adopting rapidly the techniques introduced by LDI field agents and partner organizations. The expansion of beekeeping is in part due to new market opportunities in the national economy – hopefully a market demand that can be quickly rejuvenated after the political crisis of the past months. Similarly, in comparison with last year, the rate of adoption of improved intensive rice cultivation has increased significantly with a 40% adoption rate by 2882 members covering 300 hectares in SRI/SRA techniques.



First season rice yields have increased significantly through the adoption of new techniques of SRA/SRI and this has contributed to improved revenues during the "hungry" season

Material and Credit Support

The agricultural credit granted during this past year exceeded largely the anticipated objective of \$15,000 for the Fianarantsoa sites. Demand for credit far exceeded the institutional ability of LDI and its partners to meet the needs of its Kolo Harena clients. The inability to respond to the demand for new credit was largely due to difficulties encountered by LDI staff and partners in visiting the community granaries (GCV) and other sites prior to the deblocking of funds. Few visits could be effectuated to sites between February and June, 2002 because the transport system collapsed due to lack of fuel for vehicles and, hence, the inability of partners like the *Entreprendre à Madagascar* and the Bank of Africa to carry out proper credit granting procedures.

As a precaution during this time of political and economic uncertainty, the granting of credit to agricultural supply centers obtaining less than a 60% reimbursement rate is frozen until the overall credit dynamic improves. LDI is very concerned about the ability of farmers to reimburse credit in light of the low prices farmers are receiving for their crops. But in contrast, with the agricultural supply centers that have achieved a high rate of reimbursement, credit availability was expanded by 79% over last year. The lesson from these experiences is that it takes a considerable amount of time for farmers to learn how to respect and manage rural credit, and as a result, the volume of credit granted can be less than anticipated. Yet, it is now recognized that farmers are coming to appreciate the value of responsible management of credit programs and that as a result the "culture" of credit will expand rapidly at a large scale in the year to come.

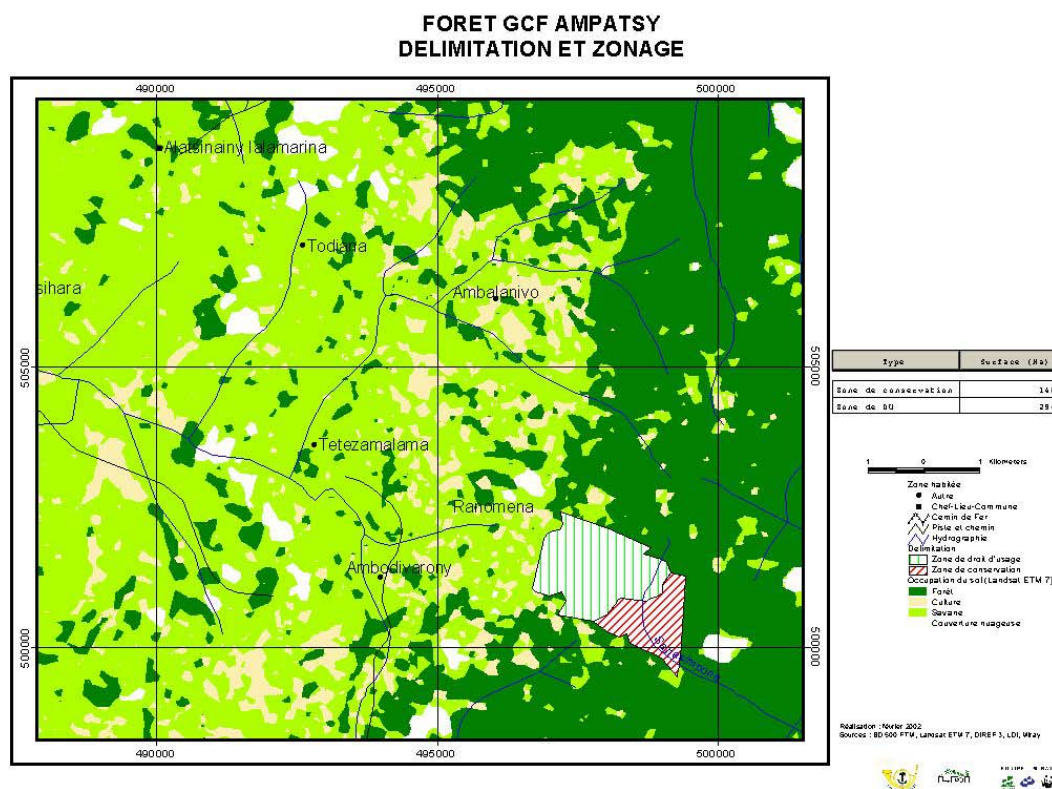
Despite the severe economic and political problems of the second semester, the revenue handled by the agricultural supply centers increased by 41% this year. A focused training program directed to the agricultural supply center management team led to improved efficiency in transactions between the centers and the wholesalers of agricultural supplies as well as in the internal monitoring of stocks. Much of this improvement can be attributed to the training provided by the *experts juniors* and the Fianarantsoa technical team. The merchandise sold by the centers now meets better the nuanced needs of local farmers working in very different agroecological conditions. Improved revenues were also generated by the reduction in price

by as much as 25% for small agricultural inputs. This in turn led to greater sales of agricultural inputs to the surrounding community.

4.1.3 Community-Based Natural Resource Management

The community-based natural resource management component bore many fruits this year as a product of the long-term commitments of a multitude of actors : the Service des Eaux & Forêts (DIREF-CIREF and the forest agents), the rural associations called the COBA (*Communauté de Base*) the LDI social organizers and *experts juniors*. The results thus far achieved are:

- The implementation of two forest management plans encompassing a total of 3 386 hectares in the natural forests in the two strategic zones of intervention of Miarinarivo and Alatsinainy-lalamarina through the mechanism of the *Gestion Contractualisée de Forêt* (GCF). The land area placed under community protection represents 75% of all forested lands in these communities. Training was provided to the COBA associations (legal entities required by the law but including Kolo Harena members) to strengthen their management skills. These trainings included modules on roles and responsibilities of different stakeholders, clarification of tenure rights and obligations, annual program planning, and monitoring and evaluation of forest resources.



The zoning of the 430 hectares forest in Alatsinainy-lalamarina

- The design of five other CGC contracts of which three are in the rural commune of Ikongo (SZI Central Corridor). Two of these contracts in Ikongo were negotiated in collaboration with the WWF CAF/Dette Nature project and the third contract was developed as a capacity building exercise by the Fianarantsoa department of water and forests. These achievements are especially gratifying because the communities initially resisted strongly the presence of LDI as noted by the early RRA report, *Flight to the Forest*. The two other contracts are situated in sites around Ranomafana National Park. The implementation of the plans should start in August, 2002. In all cases, the young woman LDI *expert junior* seconded to the Service des Eaux et Forêts in Fianarantsoa played a central role in advancing the enactment of these contracts.

- The testing of community management of eucalyptus plantations in Ambohimahamasina continued his past year though not at a rate of adoption initially anticipated due to staffing difficulties associated with the placement of an *expert junior* at the site and tree tenure constraints. The *expert junior* spent a considerable amount of time working out inter-family tenure conflicts but this has led to a much greater clarification of the rights and responsibilities of various owners of these dense stands of mature eucalyptus trees. Management plans and test cuttings did occur under the auspices of the department of water and forests in Ambalavao and the commune. This initiative will continue through the renewed partnership with the EASTA Iboaka forestry training school.

4.1.4 Promotion of Conservation Enterprises

The economic situation of southeastern Madagascar was grim over the past year. The international collapse in the price of coffee, the major export product for communities living along the eastern side of the forest corridor, continued to affect deeply the LDI conservation enterprises and the Kolo Harena associations. With no market for coffee, very little liquidity circulated in the regional economy and this affected profoundly all commercial enterprises. Similarly, the expected economic windfall from the 2001 Eclipse never materialized despite considerable investment by tour operators and other investors. Finally, the political crisis linked to the presidential elections led to disruption in national and international market relations. The lack of fuel hindered the transport of cash crops to urban markets and points of export like the port of Manakara and Tamatave. In this unfavorable economic context, the conservation enterprise component of LDI Fianarantsoa adjusted its activities to concentrate in providing technical assistance to key clients and developing new markets for promising crops. The commercial circuits associated with essential oils and medicinal plants received most of the technical assistance. Among the major achievements were:

- The establishment of a nursery of *Aloes macroclada* with the goal of establishing a private plantation of 20-40 hectares in the Ambalavao area. The HOMEOPHARMA company was identified as a potential buyer of the Aloes leaves. Initial results are promising and the program expects that experimental production will be launched in the year to come.
- The analysis of the quality of essential oil from the Bulgarian Roses grown experimentally by the company Mac & Frères. A study conducted by the ESSA Management institute of the University of Antananarivo showed promising results. The quality of oil grown in Fianarantsoa is similar to that produced in Turkey and the yields per petal are well within accepted technical norms. The quality of oil is so good that no difficulties should be encountered in exporting the product (prices sometimes reach \$5000/litre!). The rose water is also of high commercial value. With these gratifying results at hand, LDI plans to expand commercial production with Mac&Frères and the surrounding rural communities.
- The search for new markets for Madagascar essential oils, spices, and other natural products in favor of the PRONABIO members. LDI Fianarantsoa consolidated linkages between PRONABIO and the Kolo Harena producers while at the same time launching a process leading to an "eco" label of natural products from Madagascar. While the political and economic crisis has led to a disruption in the supply of export products, it is expected that these market relations can be rebuilt quite quickly due to the strong relations between PRONABIO and its clients.
- Assistance to an association of Fianarantsoa entrepreneurs seeking to expand into new markets for agricultural produce



The commercial circuits associated with essential oils and spices like pepper received most of the technical assistance from LDI

- Assistance to the association CHEF to develop commercial production of essential oils and aromatic plants around the Ranomafana National Park.

Encouraged by the results of last year's capacity building efforts around agricultural marketing with the Kolo Harena associations, the conservation enterprise component will continue these activities in the year to come. During this past year, the Kolo Harena farmer's associations benefited from new market opportunities facilitated by LDI in the honey, vegetables and fruits, Royal Carp fingerlings, and potato sectors. Gross sales from new market opportunities represented about 43 million FMG. During this current dry season, the component will be placing a particular effort on launching emergency measures to help entrepreneurs recuperate from the economic crisis.

4.1.5 Environmental Education and Communication

The environmental education and communication component is a transversal initiative in the LDI program. This component contributed significantly this year to the advancement of activities in each strategic zone of intervention through the more traditional environmental education activities. Yet during the second half of the year it undertook the challenge of implementing the Madagascar Green Health Communities initiative financed by Packard Foundation managed jointly by LDI and John Snow Incorporated (JSI). The health-population-environment work is a pilot experiment strongly supported by the USAID Madagascar mission to launch initiatives to reduce demographic pressures on the forest corridor through integrated activities in agricultural intensification, community resource management, reproductive health, and maternal and child health care. Through a \$2 million grant to JSI from the Packard Foundation, both LDI and JSI have launched a series of "fast-track" health and agricultural intensification activities in the Tolongoina and Ikongo sites. While the cost of these "integration" activities are picked up primarily by Packard Foundation funds, the initiative is coordinated under the environmental education and communication component.

The accent was placed particularly on the conceptualization and transmission of specific messages through the use of audio-visual tools. Activities over the past year include:

- Projection of a film on fish culture and its relation to environmental management in 4 sites along the forest corridor. These video showings stimulated discussions among the villagers on promising agricultural activities but also some of the constraints encountered in adoption of new techniques. (e.g.: utility of commercialization of non-timber forest products, advantages and disadvantages of Mullard duck raising)
- Rural theatre on the utility and mechanisms for establishing *Grenier Communautaire Villageois (GCV)* in four sites. These productions were met with great interest by local communities and facilitated the acceptance of this new financial mechanism.
- Design, publication, and distribution of a « *Gazety Kolo Harena* » that recounts the experiences of Kolo Harena associations in the LDI strategic zones of intervention. The large majority of articles were written by Kolo Harena farmers themselves. Publication of another issue of the Journal Fanoitsa for use primarily by farmers on the western side of the corridor.
- Conceptualization and enactment of puppet theatre on the themes of health-population-environment for two sites along the eastern side of the corridor in the Tanala dialect.
- Training in the utilization of PSI Madagascar products (Sûr'Eau, Super Moustiquaire mosquito nets, Protector condoms) offered to the federations of Kolo Harena.
- Studies co-financed by LDI and the MGHC population-health-environment initiative to determine the feasibility of establishing a rural radio in Manampatrana to reach the eastern side of the forest corridor communities.

4.1.6 Reinforcement of Local Capacity Building

The results of LDI's work in the domain of local capacity building were very tangible this year. The socio-organizers and the *experts juniors* directed a large part of their energies to the strengthening of the Kolo Harena Federations and the *Direction Interrégionale des Eaux et Forêts*. The *experts juniors* seconded to the Kolo Harena Federations succeeded in greatly improving the management of the agricultural supply centers and the associated rural credit mechanisms. One of the concrete results of this investment in training is that the 6 federations opened up bank accounts and placed approximately \$15,000. These funds are used by the federations to meet operating costs, small-scale investments, and other needs determined by the federations themselves.

The secondment of two *experts juniors* specialized in forestry to the *Direction Interrégionale des Eaux et Forêts* accelerated greatly the establishment of the *Gestion Contractualisée des Forêts (GCF)* in 7 sites

along the forest corridor. These *experts juniors* developed training modules for the forestry service as well as the Communautés de Base (COBA) as a way to standardize procedures and processes of resource transfer to local communities. The forestry service has been particularly delighted with the performance of these well trained *experts juniors* and results have been notable through the relatively rapid design and approval of the GCF contracts.

LDI Fianarantsoa continued to support actively national and international graduate student research efforts on issues of importance to the program. Theses and dissertations are being completed in the domains of crawfish ecology and managed production, bee ecology and production in the forest corridor, socio-economic studies of community forest management options, ecotourism potentialities at a site along the corridor, strengths and weaknesses of rural credit, Bulgarian Rose soil fertility dynamics, and improved Bulgarian Rose production techniques. Malagasy students are from the University of Antananarivo while international students have come from Cambridge University in the United Kingdom. Recommendations by LDI staff have led to significant private foundation support for two of the international students.

4.2 Performance Analysis

4.2.1 Qualitative Analysis

SZI North Corridor : Ranomafana National Park Buffer Zone

The situation around the Ranomafana National Park continues to be complex and rapidly evolving due to the constantly changing institutional configurations of donor assistance to the national park. The Kolo Harena of Ranomafana have distinguished themselves by excellent performance in the management of the agricultural supply center in Ambatovaky as noted through gross revenues earned by the centers¹ and the credit recovery rates.² The management of the agricultural supply center was taken over entirely in 2001 following the departure of the *expert junior*. A core group comprised of a management committee and representatives of the Kolo Harena associations are now well trained in managing the revolving funds for the center and the associated credit systems. The role of the LDI socio-organizer was critically important in launching this dynamic center. The Kolo Harena now accept the notion of contributing financial resources, labor and time to the management of the center. This self-empowerment is in stark contrast to the hand-out mentality once so prevalent in communities around the park.

While the agricultural supply center and credit systems are now functional on the northern side of the corridor, considerable efforts must continue to be expended in raising the rates of adoption of improved agricultural techniques. LDI has learned in this case that easier access to credit does not automatically lead to higher rates of adoption of improved agricultural techniques. Much more effort must be expended in the coming year to put in place an effective farmer-to-farmer extension system and to help the zone “catch up” with other strategic zones of intervention.



The expansion of tanety rehabilitation marked the agroecology landscape in the SZI along the eastern side of the forest corridor. The establishment of nurseries of tree crops in the Tolongoina and Ikongo zones is contributing to this strategy of restoring denuded hillsides with improved agroforestry systems

¹ Gross revenues of 71 millions FMG since July, 2001 and with a revolving fund of 56 millions FMG.

² A 100% recovery rate of credit managed by the *Greniers Communautaires Villageois* with a 98% recovery rate for in-kind reimbursements for seeds and other inputs.

Unfortunately, low rates of agricultural adoption are the consequence of a variety of factors ranging from failures of NGO partners to provide high quality agricultural training to high technical staff turnover on LDI's part. LDI Fianarantsoa is now obligated to invest much more of its own staff resources to fill gaps left by insufficient coverage of technical support.

SZI Central Corridor : Alatsinainy-lalamarina, Tolongoina, Ikongo and Ambohimahamasina communes

The communes of Ikongo and Tolongoina were long considered among the most remote parts of the province of Fianarantsoa. Thanks to the considerable investments of USAID in the rehabilitation of the RIP 4 road by the ReCAP project and the FCE railway by the FCER program, these sites are now poised for considerable advancement. Substantial investments of cyclone recovery funds in rehabilitating small dams have also strengthened the agricultural infrastructures. With transportation constraints largely removed, farmers are interested in diversifying production out of coffee and into other cash crops. Through the contracts with the NGOs CIADRM and CEP, the economies of ginger, cloves, pepper, and vanilla are expanding on over 100 hectares of restored *tanety* lands. This serious commitment of Kolo Harena associations to diversify tree crop production serves as the foundation for future LDI interventions.

The federations of Kolo Harena certainly express needs for further assistance from LDI in the domains of introduction of new cash crops and integration into new market circuits. The program has brokered additional inputs of technical services by the European Union STABEX program. However, adoption of agricultural techniques in traditional food crops has been slower than hoped for except in the rice production. First season rice yields have increased significantly through the adoption of new techniques of SRA/SRI and this has contributed to improved revenues during the "hungry" season. While results are not as high as hoped for, one must remember that this zone was the most suspicious and hostile to initial LDI interventions three years ago. The situation has dramatically changed with the widespread growth in trust and confidence in LDI and its partner organizations.

The Kolo Harena Federations of the eastern side of the corridor are taking development matters in their own hands. The federation of Tolongoina now manages a dehuller that increases through this food processing technology the value of coffee and rice. Since June 2001, the association has reached the stage of autonomous operations of the dehuller and it now operates year round in dehulling rice and coffee. Profits are now being obtained by the federation due to the capacity building efforts of the *expert junior*, the socio-organizers, and the technical team in Fianarantsoa.

The site of Alatsinainy-lalamarina represents an effective integration of different technical elements offered by LDI to the Kolo Harena associations. The Gestion Contractualisée des Forêts (GCF) advanced very rapidly in this zone and complemented very well the initiatives to raise the productivity of the agricultural systems. Parts of the forest corridor are the sources of several springs and streams that water the entire valleys and these are placed under community protection status. In these very valleys, the LDI technical partner, AIDE, achieved considerable successes in rapidly encouraging the adoption of a package of agricultural techniques. The Kolo Harena are now organizing themselves around specialty production of honey, vegetables and fruit, potatoes, and fish. The conservation enterprise team has worked closely with these associations to develop new markets for agricultural surpluses.

SZI South Corridor : Sendrisoa and Miarinarivo communes

The Miarinarivo site characterizes best the integration of all elements of the LDI approach to agricultural intensification, community resource management, and conservation enterprise. Through the cyclone recovery program, seven small dams were reconstructed with the majority located in the forest corridor. These small catchments capture water from the corridor forests and channel the flow down into the valley. In these forests, LDI has worked with the local communities to establish the *Gestion Contractualisée des Forêts* with the *Communauté de Base* (COBA) association. This led to the first signature on the western side of the corridor of a GCF contract. At the same time, the local communities fought valiantly against three illegal forest permits granted to outside logging interests. Through close collaboration with the local authorities, the *Comité Multi-local de Planification* (CMP), and the interregional department of water and forests, the permits were annulled to an area of 1400 hectares. This represented one of the first cases in Madagascar of annulment of an illegally granted set of forest permits.

The Kolo Harena of the southern zone have advanced considerably in the adoption of techniques and technologies offered by LDI Fianarantsoa. The two sites of Sendrisoa and Miarinarivo have actively accepted the lessons learned from training in animal traction and small-scale agricultural mechanization. The

two sites have the highest use of plows, weeders, and other locally constructed tools. The considerable expansion in the use of improved agricultural techniques has resulted in the production of surpluses in rice, potatoes, fish, and vegetables. While these achievements are notable, some difficulties in credit recovery have occurred among a small group of farmers in Miarinarivo. Now the challenge is to assist the Kolo Harena in the two sites in simple food transformation techniques and the acquisition of new regional and national markets for their surplus produce. During this coming year, LDI will work with other donors to improve the road leading from Miarinarivo to Ambalavao in order to facilitate the evacuation of considerable rice surpluses. USAID *Fonds Contre Valeur* will be employed this year to rebuild a seriously deteriorated bridge and then efforts will be continued to draw in support from the *Programme Sectoriel de Transport* and other donors.

4.3 Quantitative Analysis

4.3.1 Performance according to indicators

Indicators for July 2001 To June 2002	Situation in June 2002	Observations
Indicators for Activities		
Agricultural Intensification <ul style="list-style-type: none"> - increase in yields: 20% - increase in revenues: 20% - Credit granted : \$15,787 	<ul style="list-style-type: none"> - 20 to 159% augmentation of yields - 9 to 34% increase of revenues - Credit granted: \$20 597 (\$10,544 from Input supply centers and \$10,053 from micro-credit) 	Minimum and maximum yields : <ul style="list-style-type: none"> • Off-season potatoes : 12 to 22 T/ha • Beans : 0.5 to 2.7 T/ha • Rice: 2.1 to 6.5 T/ha • Maize : 0.18 to 3.5 T /ha
Environmental Education <ul style="list-style-type: none"> - 2 new projects supported by LDI in environmental education - 5 new activities implemented in environmental education and communication - 200 Kolo Harena targeted by the environmental education and communication activities 	<ul style="list-style-type: none"> • Edition and publishing of the journal "Gazety Kolo Harena" and "Fanoïtsa" No.12 • Preliminary technical study of the installation of a radio station in Manampatrana • Presentation of puppet show and theatre on GCV graineries and integrated health-population-environment activities • Sale promotion of PSI products within the health-population-environment integration program • Production of film on fish culture • More than 300 farmers (non Kolo Harena and Kolo Harena) beneficiaries of environmental media activities 	Ikongo, Tolongoina Sur'eau, mosquito nets, condoms sold through the agricultural supply centers operated by Kolo Harena federations.

Community Based Natural Resources Management <ul style="list-style-type: none"> - 20 villages doing community conservation, Gelose or GPF activities - 3 Community Resource Management Contracts signed - 3 Contractual Forest management plans implemented - 300 hectares placed under community resource management agreements - 20 hectares of reforestation (2.5 ha per sites) by local communities 	<ul style="list-style-type: none"> - 16 villages - 1 contract will be signed by the end of June 2002. - 2 Contractual Forest management plan under implementation - 430 hectares in Alatsinainy-lalamarina - 40 hectares of reforestation 	Alatsinainy-lalamarina: Ampatsy - Anara Nord- Anara Sud - Antsomaina - Ranomena- Sahalava - Tetezamalama Ikongo: Ambalagoavy, Ambalagoavy. Sendrisoa: Ilaivory Nord - Andronivato Miarinarivo: Anarafolaka - Miarinarivo - Soamanandrarinny Vantanamaso – Angalampona 523 members of COBA (Communauté de Base)
Conservation Enterprises <ul style="list-style-type: none"> - Number of EFE supported : 8 - 2 new EFE investment projects - Total investment of \$50,000 in the EFEs - 200 villagers supported by LDI having commercial relations with the EFEs 	<ul style="list-style-type: none"> • 14 EFE supported • Acquisition of alembics for essential oils by PRONABIO and a processing unit for essential oils by BIOSAVE in process. • 459 members of Kolo Harena associations 	Delta Informatique, ARATO, PRONABIO, BIOSAVE, CHEF, SEPAM, Fidèle, Mac & Frères, MG Frères, CEVOI, AGROMAN, SOGEP, RAMEX, CCD Namana Products sold by the Kolo Harena are potatoes, honey, orange and Royal Carp.
Local Capacity Building <ul style="list-style-type: none"> - 250 Kolo Harena associations created - 3 000 household members working with LDI - 6 Federations of Kolo Harena associations are operational in Agricultural Inputs Supply centers management and other socio-organization related activities - in every site, at least 1 “paysan vulgarisateur” is trained and specialized in one activity to assist the other Kolo Harena members 	<ul style="list-style-type: none"> - 276 Kolo Harena - 2 882 members - 6 federations managing the Agricultural input supply centers supported by 3 expert-juniors - 166 paysans vulgarisateurs identified 	147 villages
Indicators for Sub-Results		
Reduction of the expansion of agricultural lands within priority ecosystems <ul style="list-style-type: none"> - follow-up of the human pressure trends in the SZI 	2 pilot sites in Andohanisoa, in Miarinarivo (SZI South corridor) and Ranomena, in Alatsinainy-lalamarina (SZI Central corridor)	Monitoring of tavy will be continued in November, during which season tavy practices often occurred.

Increase of commercial benefits from sustainable use of natural resources <ul style="list-style-type: none"> - inventory of new EFE projects developed by other EFE in the region 	PRONABIO, an association of exporters of natural and organic products from Madagascar, negotiated several commercial contracts targeting the US market for spices and essential oils.	
Reinforcement of Kolo Harena associations to undertake sustainable development <ul style="list-style-type: none"> - 50% of targeted families have adopted improved practices. - Number of Kolo Harena participating in conservation and development activities 	<ul style="list-style-type: none"> - 33% of Kolo Harena members - 1840 Kolo Harena members 	60% adoption rate for season crops and 39% adoption rate for income generating activities like off-season crops, cash crops and small husbandry.

4.3.2 Analysis of Indicators

Indicators of Agricultural Intensification Activities

The number of Kolo Harena farmers financed through the regular Intervention Fund has stabilized around 3000 people. When members of the COBA forestry associations and AUE water users associations are included, the total number of farmers LDI Fianarantsoa works with is about 4000 people. Growth was not as dramatic as originally hoped for. With the termination of the technical assistance contract with the NGO Tefy Saina, LDI found that many associations around the Ranomafana National Park had accomplished relatively little or indeed disintegrated entirely following the departure of this partner. The lack of significant growth is also explained by the limited number of field staff (4 *animateurs communautaires*) in charge of the 1200 Kolo Harena in Ranomafana due to the budget restriction in July 2001. This coming year, LDI turns again to the question of how to strengthen the Kolo Harena associations around Ranomafana National Park and achieve better results.

The Kolo Harena continue to achieve excellent performances in the production domain with increases in production on the average 50% (rice, beans, other food crops) more than traditional harvests. These increases are due especially to the favorable rains during the past rainy season but also to the continuing efforts by the farmers to test, adopt, and modify the various agricultural approaches suggested by LDI and its partners.

The impact of LDI Fianarantsoa's interventions on household revenues is less than satisfactory this year in comparison to the previous year (2000-2001) and the objective set of obtaining a 20% increase in household income this past year (2001-2002). Many factors appear to be responsible for this relatively weak revenue increase. The international collapse in the price of coffee deeply affected the cash economy of Tanala and Betsileo communities along the corridor. Rice prices fell as well due to flooding of the national market by imported rice – a dynamic linked to the presidential elections and possibly international money laundering. With very little cash liquidity in the rural economy, farmers disposed of few means to invest in agricultural activities. Without a certain financial cushion, rural communities could not take risks in experimenting with the technical packages proposed by LDI, and for this reason, only 33% of the Kolo Harena adopted these technical themes. Risk aversion was particularly noted in the hesitancy of Kolo Harena to invest in income generation activities requiring even minuscule personal investments of financial resources. In light of the fact that 70% of the Kolo Harena interviewed earned only 1 million FMG (about \$150) last year, it is understandable that most of the farmers hesitated to accept wholeheartedly new technologies that require a certain degree of risky investments of labor, time, and some finances. The situation for small farmers may become even more precarious this year due to the recent economic and political crisis. Dramatic declines in the sale price of rice and other cash crops due to the collapse of markets will render a difficult situation even worse unless crisis mitigation efforts programs function well.

Indicators of Environmental Education and Communication Activities

The environmental education and communication component found its stride this year following staff turnover. Recruitment and training of a new staff member took time. But LDI was able to build upon the experience gained with working with environmental education and communication partners over the past year in launching new audiovisual and media activities. The Kolo Harena have enthusiastically incorporated these messages and information into their understandings of the importance of sustainable management of natural resources at the household level. Farm families were especially receptive to the puppet theaters used to introduce the health-population-environment program in Ikongo and Tolongoina. The progressively changing behaviors of rural populations in terms of rates of adoption of agricultural techniques, acceptance of the new GCF forest contract mechanism, and initial indications of a reduction in the dependence on slash-and-burn agriculture is a testimony to the efficacy of this component.

At the regional level, LDI Fianarantsoa continues to play an active catalyst role in maintaining dialogue between government and civil society. During the recent political crisis, LDI was able to work with government authorities along all political spectrums to maintain a focus on the importance of sound management of the forest corridor and the necessity to move forward with the agriculture and rural development agenda. The communication of these environment, health, and development themes will continue in the year to come.

CBNRM Indicators

Three GCF contracts await approval (Alatsinainy-lalamarina, Ambodiara et Ambalagoavy in Ikongo) by the forestry service. These approvals will probably occur in the near future as the political situation returns to stability. The advancement of the GCF process and the increase in the amount of forest placed under this contractual mechanism demonstrates the deep interest in the mechanism by local communities and the forestry service. In spite of the complexity of the legal procedures required to enact a GCF contract, LDI has conclusively shown the importance of environmental education and training in launching this new community conservation tool. The growing interest and responsibilities of the beneficiaries in the GCF process will be especially important this next year as LDI works with the COBA to implement the forestry management plans.



The implementation of forestry management plans includes the sustainable use of non-timber forest products to generate economic values

Indicators of Conservation Enterprises Component

The LDI Fianarantsoa program did not succeed in launching the credit initiative through the FIEFE financing mechanism. Too many structural obstacles undermined the credit program despite the enthusiasm of potential clients. The banking sector simply could not work with many of the LDI clients unless they met all banking conditions. Payment of back taxes, regulation of land titles, and compliance with other legal measures required by the banks simply could not be satisfied by the clients in the political climate of the past year. For these reason, the conservation enterprise component invested the majority of its time and resources in capacity building and direct material assistance. The conservation enterprise component did respond well to working with commercial enterprises seeking to break into new international markets like essential oils. Once dependent for 90% of their revenues on coffee exports, these firms turned to new market opportunities due to the international crash in the price of robusta coffee. The component worked increasingly with such companies as the SEPAM, CHEF, Fidèle, and others who are linked to major essential oil exporters organized under the auspices of the LDI initiated PRONABIO structure.

With the increase in the production surplus generated by Kolo Harena this past year, the linkages built between the Kolo Harena producers and conservation enterprises takes on a new allure. National companies like JB and RAMEX are increasingly interested in purchasing high quality produce, like honey and fruits, from the Kolo Harena. Market development will continue to be a major focus of the conservation enterprise component over the coming year. Hopefully, market stability will return in association with the resolution of Madagascar's political crisis.

Capacity-Building Indicators

The experience gained by certain federations of Kolo Harena in the management of agricultural supply centers and associated credit schemes showed the potentiality for growth in management capacity. The launching of the farmer-to-farmer extension system was successful in some sites, though much work is required to refine the model as well as expand the breadth of the initiative. LDI Fianarantsoa must continue to direct assistance by its field staff to this approach and work particularly closely with the federations of Kolo Harena to strengthen the farmer-to-farmer model and monitor the impacts of the new extension orientation.

While the political and economic crisis affected regional capacity building initiatives, it is clear that LDI Fianarantsoa must continue to support actively the strengthening of regional coordination and information sharing institutions, help regional policy makers develop more refined policy in the domains of environment, agriculture, transport, rural credit, and health care to remote populations along the forest corridor.

5. Mahajanga Region

5.1. Main Results

The year 2001-2002 was marked by the cessation of LDI's regular activities and their resumption by the NGO GREEN in January 2002. Activities during the year mainly focused on providing assistance to Kolo Harenas in the domains of agricultural intensification, technical support, and credit and supply center management support. LDI also contributed to Kolo Harenas' organizational capacity building, and assisted basic communities in the community management of natural resources.

5.1.1 Agricultural Intensification

- The CDIA Miadana produced and supplied 5 tons of improved seeds and 16000 seedlings to the 64 Kolo Harenas and LDI partners.
- The yield survey is under review in the SZIs.
- The 5 agricultural supply centers are provided management support. A convention of collaboration was entered into with each Federation for the management of agricultural supply centers.
- A total of MGF 37,457,500 credit was granted to 106 members of 14 Kolo Harenas. Some delays were encountered in the deblocking of funds in Mahajanga, which affected the credit schedule. 3 Kolo Harena associations withdrew ; as a result, 48 percent of the demand expressed were released.

5.1.2 Community Management of Natural Resources

The assistance to the implementation of the development plan and the management contract led to the finalization of a periodical forest monitoring program and a new workplan for the year 2002-2003 for each Local Basic Community (COBA). The forest management contract for the Belalitra forest in Ankijabe was signed in May 2002 ; thus, 56 ha of forest were placed under the protection of 90 COBA members.



5.1.3 Capacity Building

A local monitoring committee was set up and an annual workplan was developed for each of the 5 existing Federations.

5.1.4 EFE

A total credit of MGF 95,900,000 was granted to 1000 households in the city of Mahajanga through the initiative undertaken in association with EAM and VITOGAZ within the framework of the credit for charcoal substitute fuels.

5.1.5 Monitoring and Evaluation

The finalization of a database in Access including the indicators for each SZI of intervention is underway.

5.2 Performance Analysis

5.2.1 Qualitative analysis

In general, Kolo Harenas are used to LDI's working methods. The techniques proposed are gradually adopted and used. Nevertheless, there was a delay especially in credit release on account of administrative difficulties associated with the transfer of activities from LDI to GREEN.

5.2.2 Quantitative analysis

The indicators were achieved, sometimes with delays attributable to the economic context of the country. The country's political crisis has affected the results even if there were no direct consequence in the field.

6. Moramanga Region

Context

The LDI Moramanga program continues to work to protect Madagascar's unique biodiversity by reinforcing synergies that exist between agricultural intensification and food security, economic growth and poverty alleviation, and environmental sustainability. Using an eco-regional approach, based on agricultural intensification, community management of natural resources, environmental education, promotion of environmentally friendly small enterprises and local/regional capacity building activities, LDI staff are working to address the social, political and economic forces that lead to biodiversity loss within the Moramanga region.

Work during this next to last year of the program has concentrated on reinforcing the organizational and technical capacity of existing Kolo Harena farmer associations and regional level partners (Malagasy NGOs and government officials) and scaling up our interventions (three new strategic zones of intervention and a new CDIA in Ilaka Est) in hopes of assuring sustainability. Increasing emphasis has been placed on transforming Kolo Harena federations into successful Producer Groups that are equipped with the necessary business management and negotiation skills to continue long after the program ends. Along this same line of thought, peer identified and LDI trained farmer extension agents for each Kolo Harena association play a major role in the scaling-up process and the effort to insure sustainability. LDI Moramanga staff are pleased by the rapidly growing interest and commitment to program activities by rural communities – a marked contrast to previous years. The key challenge for next year is to meet the demand from rural communities to expand the number of Kolo Harena associations and associated services, as well as insure that the Kolo Harena framework for farmer organization is on solid enough ground to continue of its own accord.

6.1 Principal Results

6.1.1 Eco-regional support

In support of the eco-regional approach, LDI Moramanga continues to collaborate with the Mangoro CRD (Comité Régional du Développement) and the CORDAL (Comité Régional pour le Développement de l'Alaotra) to better define global regional conservation and development objectives and implement well coordinated activities designed to conserve the region's unique biodiversity and promote sustainable economic growth.

One of LDI Moramanga's major eco-regional efforts in the last year was to facilitate farmer information exchange, improve access to financial systems and increase business opportunities by reinforcing the regional network of Kolo Harena farmer associations and federations. Thanks to this effort, Kolo Harena associations are considered by many local government (Chamber of Commerce) and international assistance organizations (PSDR, GTDR and the World Bank) to be the most efficient and trustworthy means of getting financial support to the field; 80% of all dossiers that these institutions have received originate with Kolo Harena associations and federations. Unfortunately, primarily as a consequence of the political crisis, these dossiers still await funding approval.



Kolo Harena, associations recognized by PSDR. Here, Kolo Harena members prepare the funding request

LDI Moramanga's eco-regional activities have also generated considerable interest from international and national NGOs which are committed to financially assisting integrated and farmer-to-farmer initiatives. The Packard foundation has provided a grant to LDI and JSI to test an integrated approach to population and environment activities that has proven to be a real catalyst for expanding (into the adjacent Andasibe and Ambatovola areas) our activities in the strategic zone of Beforona. Beforona has also benefited from continued « in-kind » and technical support from Cornell University to the CDIA, as well as a \$15,000 grant from the Switzerland based Roger Haus Foundation.

With the continued success of the CDIA in Beforona, it was decided in collaboration with the local the farmers to try and replicate the experience in the Vatomandry region. This region was once one of the major

coffee producing areas in the world, but unfortunately coffee and other cash crop production has fallen drastically in recent years due to a lack of technical assistance and market opportunities. The functional CDIA in Ilaka Est has begun to address these issues and is already considered a success by farmers in the region.

A summary of LDI Moramanga's eco-regional support activities follows:

- Assisted in the organization and participated in the eco-regional planning process for the Lac Alaotra region;
- Participated in the CPSE (Comité de Planification et Suivi/Evaluation) group for the Moramanga region;
- Supported the AGERAS eco-regional planning process through a joint venture to produce an economic and natural resource pressure analysis study for the Moramanga eco-region;
- Participated in eco-regional planning process of the Moramanga CRD (Comité Régional du Développement);
- Organized site visits and contracted with ECR to develop a management plan for the rehabilitation of what was once the premier FOFIFA coffee research center in the country (located in Ilaka Est);
- Helped farmers designed and put in to place a second CDIA in Ilaka-Est;
- Reinforced the Beforona CDIA's capacity to assume its role as a regional research, training and demonstration for the intensification of agriculture;
- Organized Farmer-to-Farmer exchanges between ADRA and LDI farmers in the region with the expressed objective of promoting an open exchange of ideas between farmers;
- Organized inter-regional Kolo Harena farmer exchange visit between Kolo Harena farmers in the Moramanga and Fianarantsoa regions;
- Organized technical training sessions, on various agricultural intensification, natural resource management and health themes for up to 500 Kolo Harena farmers;
- Organized 4 regional level workshops to reinforce the business and organizational capacity of Kolo Harena farmers;
- Supported, through continued assistance to MATEZA and ANGAP, monitoring and conservation activities in the Zahamena-Mantadia forest corridor;
- Supported the conception and production of an extension field manual for use by farmer extension agents;
- Continued technical assistance to the rural radio in Beforona, and provided integrated radio messages to regional radio stations to promote large scale diffusion of conservation and development messages;
- Organized economic roundtable for 6 Kolo Harena Federations operating in the region;
- Helped create Kolo Harena marketing poster;
- Helped farmers design their farmer-to-farmer system of knowledge sharing
- Contributed to the writing and submission of a proposal to Packard Foundation for the financing of a test program, in Beforona, that integrates environmental and health activities;
- Participated, in collaboration with JSI and SAF-FJKM, in the conception and rural extension of the "Champion Community" concept in integrated villages in the commune of Beforona.

6.1.2 Agricultural Intensification

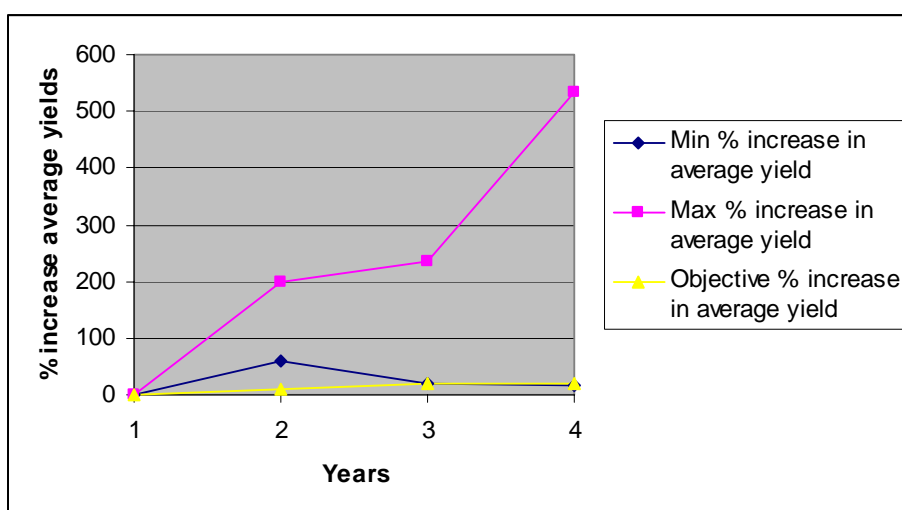
The agricultural intensification component continued to expand dramatically as NGO partners working in LDI strategic zones of intervention began to understand how to effectively work with the Kolo Harena associations. NGOs partners were particularly effective in expanding the adoption of improved food cropping techniques. Faithful to our commitment to working closely with the technical services of government ministries (CIRAGRI, *Service de Pêche*, CIREL, FOFIFA ...), LDI Moramanga is currently working with 291 Kolo Harena associations composed of 8,946 members throughout the 7 strategic zones of intervention. In general, this year's results greatly surpassed those of last year in terms of adoption rates and total area affected by program interventions.

Agricultural intensification Highlights

During this year over 3,500 Kolo Harena farmers (IF, FRC, AUE) benefited from access to improved, sustainable agricultural intensification techniques that were designed to help farmers diversify and intensify their farming systems. For all the fields not destroyed by inclement weather conditions, average yields for each agricultural activity and household incomes increased surpassing objectives set for this past year.

The following statistics highlight some of the major Kolo Harena associations' accomplishments this past year.

- **Lowland rice field** : 470 ha were put into production using SRI, SRA techniques by 676 families (KH IF) with a 67 % adoption rate.
- **Upland perma-culture**: 5.6 ha of abandoned upland fields were rehabilitated with organic food crops by 150 families with a 21% adoption rate.
- **Off season crops**: 528 ha of land were put into production of off-season crops by 108 families with a 15% adoption rate.
- **Cash crop**: 140,200 coffee seedlings (38 ha) were planted by 349 families, and , 20.5 ha of mixed cash crop trees are currently being planted (banana, onion, litchi, clove, cinnamon, and pepper);
- **Soil fertility**: 2292 m3 of compost was produced and used on home gardens and rice fields by more than 45 new adopting families.
- **Small animal husbandry**: 772 farm families insured that 6, 707 chickens received all appropriate vaccinations, 22 improved chicken houses were built by 120 families, 264 improved bee hives were built by 91 families, 44 fish ponds were constructed by 40 families and 97 improved pork production facilities were constructed by 34 families.
- **Technical Training**: Over 1500 Kolo Harena farmers, 37 LDI field staff, and 69 technicians from other NGOs benefited from sessions on 17 different topics (agriculture, small animal husbandry, health, plant pest and disease, GCV management, organic agriculture, socio-organisation.....).



Material and Credit Support

Access to factors of production and micro credit still remains an obstacle to agricultural intensification in the Moramanga region. However, thanks in part to support from BEST and SOATEG, there have been considerable advances in the availability of agricultural inputs through well organized, managed and accountable Kolo Harena farmer association run Agricultural Input Supply Centers. Micro-credit access has improved some from last year, but collaboration with OTIV remains difficult resulting in slow disbursement of funds. Nonetheless, access to micro-credit continues to be an important farm management tool, especially for supplemental income generating activities such as fish, poultry and honey production.

Agricultural Supply Centers

Using an initial "start-up" fund of 33,000 USD, this agricultural year (2001-2002) the Agricultural Input Supply Centers have generated, through sale of improved seeds and small-scale equipment, approximately 7,000 USD for continued operation in the form of a revolving fund.

Micro-credit

During this agricultural year, 160 farmers from 32 Kolo Harena associations acquired 13,000 USD in small loans for crop and animal production. Fifty-two percent of these loans originated with farmers from the 4 original strategic zones, and the rest from the new strategic zones of Vatomandry, Fénerive Est and Brickaville. The reimbursement rate stands at 60%, but many crops are still under production making it difficult to measure the true level of reimbursement.

6.1.3 Community-based Natural Resource Management

Land tenure and resource management rights and skills have been the focus of much of LDI Moramanga's work around Lac Alaotra this past year. Thanks to an excellent collaborative relationship with Durrell Wildlife Conservation Trust and local governmental officials, management of large areas of threatened marsh eco-systems around the lake are either in the process of being transferred, or have already successfully been transferred to local communities. LDI staff has also invested considerable time in helping each Kolo Harena associations define and implement their natural resource management objectives. Activities include production and use of compost, watershed erosion control and soil improvement, community planning, management and self-surveillance of forest resources.

The following are highlights of LDI's efforts at the end of this year:

- Signed a four-party agreement between MEF, the province of Toamasina, ANGAP, and LDI to define a common vision for the protection of the Mantadia-Zahamena corridor and the creation of an annual work plan for the implementation of this vision;
- Supported activities to resolve the problem of an illegal village within the National Park of Zahamena under the above mentioned agreement;
- Organized and participated in training workshops to help our partner organizations better understand natural resource management transfer procedures such as GELOSE and GCF;
- Completed the transfer of natural resource management rights to local communities for two sites in the region of Lake Alaotra totaling (456.5ha), signature of 2 other GCF contracts are expected by the end of June 2002;
- Assisted farmers in planting 170,200 trees, 30,000 woody legumes and over 5,000 slips of vetiver to stabilize landslides and protect watersheds;
- Helped farmers stabilized and improve soil fertility on 12.5 ha of uplands;
- Assisted farmers in re-establishing 107 ha of threatened marsh eco-systems in and around in Lac Alaotra;
- Provided technical assistance to farmers which resulted in the production and use of over 3,500 m³ of compost;
- Continued to work with Durrell Wildlife Conservation Trust to promote community initiatives for sustainable land use planning and management around Lac Alaotra.

6.1.4 Communication and Environmental Education

Communication and Environmental Education activities fall into three broad categories: environmental education through training sessions and support of regional level information sharing workshops and events, environmental education through the creation of appropriate tools and infrastructure to communicate key agricultural and environmental messages to villagers and population - environment integration initiative with Voahary Salama. The following represent communication and environmental education activity highlights for the past year. Working with CCEE, ANGAP, ADRA, Durrell, MIRAY and MAB, LDI contributed to the Regional Communication Plan for Moramanga and Alaotra through radio emissions, creation of Village Cultural Centers and promotion of environmental education sessions within the educational system.

Environmental Training, Workshops and Events

- Organized, in collaboration with Peace Corps, an eco-tournament for children from all 7 strategic zones of intervention;
- Organized environmental training on the importance of a "landscape approach" for farmer extension agents;
- Financially and logistically supported a workshop designed to integrate the Lac Alaotra region into the RAMSAR wetlands convention;
- Provide technical and organizational support for the following environmental events:
 - Vavy Sambany 2000 : a regional fair celebrating rural women and their contribution to conservation (Beforona)
 - Fetin'ny zetra 2000, 2001, 2002 : a sub-regional fair celebrating the importance of the Lac Alaotra marshes and the role they play in protecting the environment (more than 15 villages around Lake Alaotra, with the participation of 6 Kolo Harena associations)
 - International Arbor Day: including the planting of 9,130 coffee trees and 936 *Pygeum Africanus* (Ambatovy)

- International World Environment Day 2000-2001-2002 : a regional event celebrating the importance of protecting the environment (Moramanga and Fenerive Est).

Environmental Infrastructure and Tools

The environmental communication program continued to expand with the production of a number of key communication tools transmitting key messages on the type of support given by LDI. These communication tools included:

- Projection of videos on fish farming, landscape approach, coffee production techniques and SRI at the CDIA;
- Design of site specific technical "how to" audiocassettes, in order to communicate environmental messages and improved agricultural techniques to expanded target groups throughout the region via local radio stations;
- A technical study on the possibility of putting in place a relay antenna for the RRA (Radio Akon' Ambanivola) farmer managed rural radio in the Beforona strategic zone of intervention. Provided continued technical and programmatic assistance to this station which allows communities to receive information about impending cyclones but also serves as a medium to spread environmental, agricultural, and public health messages.
- Technically and financially assisted in the production of a video explaining the importance of protecting the Lac Aloatra wetlands;
- Produced two "how to" film-strip series (on SRI and compost techniques) to be used as training material for the CDIA;
- Continued the production and distribution of Kolo Harena farmer newsletter;
- Produced an information sharing poster for the promotion of environmentally friendly ginger production techniques;
- Installed BLU radio system in LDI strategic zones of intervention (Beforona, Antanandava, Lac Aloatra and Vatomandry) to improve communication capacities;

The integration of health and the environment.

Over the past year LDI and SAF-FJKM have worked closely together to develop joint programs to provide public health and family planning services to rural communities in the Beforona strategic zone of intervention. The main objective of this program is to integrate strategies for relieving demographic and environmental pressures on the forest ecosystem in this zone. LDI field agents took part in cross-training sessions organized by SAF-FJKM designed to provide them with basic health, nutrition and family planning information that they can share with Kolo Harena farmers. Likewise SAF-FJKM village animators took part in cross-training sessions on basic agricultural and environmental themes. The goal was to ensure that Kolo Harena learn about basic family planning methods. With a grant obtained from Packard Foundation, JSI, LDI and SAF-FJKM through the Voahary Salama program are carrying out test population-environment initiatives (linking potable water, family planning, and child health with agricultural intensification and natural resources management) in communities along the eastern side of the forest corridor. Highlights of these integrated initiatives include:

- Worked with JSI, Michigan University and Kolo Harena farmers to define evaluate and select key environmental, agricultural and health message to be used within Beforona strategic zone of intervention;
- Provided agricultural and environmental technical cross-training sessions for SAF-FJKM field agents and village animators;
- Contributed to and participated with SAF-FJKM in various workshops on family health issues to better be able to provide Kolo Harena farm families with basic information relevant to their health;



Fishculture provides food diversification and an important additionnal income

6.1.5 Promotion of Conservation Enterprises and FIEFE

The conservation enterprise component continued to expand on many fronts. This program provides support to the agricultural intensification component by developing market linkages for the surplus product that is starting to be produced by the Kolo Harena members. But at the same time it expanded its role in starting up new conservation enterprises in LDI's strategic zones of intervention.

Our actions during the year 2001-2002 were focused specifically on the reinforcement of initiatives undertaken in previous years. Concerning the access to FIEFE financing, specific efforts were made to monitor activity progress in the two companies recipient of FIEFE credit ; and speed up negotiation of requests for FIEFE financing under review and submitted to the banks. Such efforts also concern the finalization of the business plan in progress and the identification and development of new ideas of project. In view of the current political crisis, and following the surveys of economic operators in our region, new needs for cash were identified. As regards business relationships existing between basic Kolo Harena associations and private sector operators, grouped marketing of agricultural products and marketing via direct negotiations without intermediaries were promoted, in particular for companies members of PRONABIO. In order to increase the value of local products, small local processing units of farm produce were started in a number of regions. Similarly, studies for the improvement of means of production commonly used in the distillation sector were undertaken in association with essential oils companies, concurrently with research aimed at improving the quality of oils produced. In the domain of cash crops diversification, special support was provided to new sectors including ginger, pepper, onion and sericulture.

Financing by FIEFE

- Monitoring of the use of FIEFE credit granted to two essential oils companies and their activity progress;
- Granting of a total amount of MGF 400 million to one essential oil company.
- Speeding up of the review of 3 requests for FIEFE financing submitted to financial institutions, including a project nearing approval for the extension of organic pepper cultivation, for a total investment of more than MGF 1 billion.

Diversification of Support Networks and Extension of Intervention Zones

- Support to 25 companies of which 8 operate in the essential oil sector, 4 in organic products, 5 in forestry and medicinal plants, 3 in ecotourism, 2 in sericulture, and 2 in farm products processing. Those companies work with over 2000 farmers throughout our 6 ZSI.

Business Relationships Between Village Communities and the Private Sector

- Support to the establishment of direct business relationships between 12 operators and village communities.
- Finalization of 9 firm production and/or marketing contracts for a total amount of over MGF 500 million.



Ecological ginger, a profitable cash crop which respect the environment

6.1.6 Capacity building

LDI Moramanga focused a large part of its capacity building efforts on ways to strengthen the 291 formalized Kolo Harena associations. 8 Kolo Harena federations are now functional and are supported by expert-juniors to assist in the management of 8 agricultural supply centers. LDI socio-organizers and expert-junior conducted intensive training for the committee members on management, accounting, proposal and budget development in view of reinforcing the autonomy of existing structures and their ability to leverage outside funding (PSDR). In fact, in the Moramanga region the Kolo Harena movement has become a legitimate and credible voice for local farmers (Kolo Harena representatives on the administrative council of the national Comité de Paysan Malagache (CPM) and part of the board of directors for the regional Agriculture Advisory board).

The present challenge faced by the LDI technical staff and its partners is to conserve the good quality of the training services in the midst of continued expansion of Kolo Harena associations. To do this LDI has helped Kolo Harena farmer associations put into practice a farmer-to-farmer knowledge sharing system that involves continuous agricultural and communication technical training. With support from LDI technical staff, each Kolo Harena association has selected farmer leaders to attend monthly training sessions held at the CDIA in Beforona. These farmer leaders come to the training with a list of fellow farmers that we will share their knowledge with. After the training session they return to their associations with technical know-how and

appropriate communication tools to share information with other farmers in their area.

The LDI program is particularly concerned about the long-term viability of interventions financed through its partners. In collaboration with CIRAGRI, SAF-FJKM, the University of Antananarivo and other specialized consultants, LDI finances practical training on such various subjects as bee-keeping, intensive rice production, integrated pest management, fish culture, potato and coffee farming. These training programs are highly appreciated by the Kolo Harena farmers and NGO field partners, and have contributed directly to increased yields and household revenues. Even though this capacity building work has taken much time and investment of resources, LDI Moramanga remains convinced that the only way to assure sustainability of current activities is to gradually direct more and more effort toward helping local farmer associations/producer groups to become self-sufficient through improved organizational, knowledge sharing and business skills.

Cooperation with national and international research institutions continued through very small stipends offered to students to carry out field research of interest to LDI.

Staff training continued with senior staff participating in international conferences in the United States and Africa. The associate director for agricultural intensification traveled to the United States to attend a leadership conference in Hawaii, and field staff profited by numerous on-site training programs in agricultural intensification, natural resource management and farmer organization techniques.

The following list represents highlights of LDI activities in this sector for the past year:

- Assisted in the creation of 222 associations (97 IF AKH, 85 KH FRC, 25 AUE, 8 partnership associations, and 7 COBA) representing a 51.5 % increase from last year
- Assisting in the creation of new Kolo Harena associations in the new strategic zones of intervention (Brickaville/Vatomandry, Fenerive-Est, Lovoka)
- Contributed to the creation of 8 Kolo Harena Federations (1 for each strategic zone of intervention, plus two other respectively in Lovoka zone and the west side of Lac Alaotra)
- Provided technical and financial support for management training provided to the committee members of each Federation
- Provided technical and financial support for farmer cooperative training provided to the new Kolo Harena members.
- Supported the identification of "farmer leaders" (selected by the Kolo Harena associations) to begin the transition to a Farmer-to-Farmer extension approach in all LDI strategic intervention zones.
- Provided training, in partnership with CHTT, for "farmer leaders" in Fenerive-Est and Brickaville/Vatomandry strategic zones for the "farmer to farmer" process.
- Organized and provided financial support for a Federation level annual workshop to discuss options that will assure the sustainability of Kolo Harena Federations, and get feedback on perceptions of the LDI approach
- Negotiated contracts with the NGO Mateza and CRS Toamasina that will provide technical assistance to new Kolo Harena associations in Fenerive Est and Brickaville/Vatomandry)
- Provided technical training for elected officials of the Kolo Harena Farmer Federations in Lac Alaotra, Antanandava, Ambatovy and Beforona;
- Provided business and technical skills training to personnel responsible for the marketing aspects of the Kolo Harena Federations and the Agricultural Input Supply Centers.

6.1.7 Monitoring and evaluation

- Revised LDI's monitoring and evaluation system by including Kolo Harena farmers in the data collection and preliminary analysis, thereby creating a truly participatory sustainable follow-up tool that Kolo Harena associations will be able to use long after the end of the LDI program;
- Helped design and implement a pilot project for participatory monitoring of Tavy in the village of Ambalavero in the Beforona strategic zone of intervention;



LDI encourage the community participation during activities appraisal

- Helped design a monitoring and evaluation software system to track Kolo Harena and EFE developments ;
- Put into place a « hands-on » monitoring and evaluation tool in the form of household record keeping done by farmers and LDI field agents.

6.2 Performance Analysis

6.2.1 Qualitative Analysis

Many local residents now recognize the importance of natural resources in their everyday life and for the future of their offspring, and wish to protect those resources with enthusiasm and conviction. Thus, in the region of Antsihanaka, abuses are condemned and the respect of applicable standards became a reality, for instance as regards the dimension of nets or the respect of annual closure rules, despite the unexpected advantage offered by politicians who announced that prohibition will be lifted before time. All this augurs prospects of success for our ZSIs, as already confirmed by a significant reduction of pressures such as bush fires, *zetra* fires and illegal fishing in Kolo Harena villages and even beyond those boundaries.

In the domain of capacity-building, the participation of recipients – a key step in the process of professionalization of these associations – begins to mature in certain members ; the services provided by our socio-organization partners (BEST, BRL, SOATEG), in particular the field work of *experts junior* further develop the knowledge acquired.

The country approach initiated with stakeholders-recipients KH was gradually improved and expanded into an "integrated approach" with the contribution of and support from NGOs such as Peace Corps, CHTT, CRS, BRL, MATEZA, Tanimaitso, AKAMA, SAF-ECHO-MGHC and ZINA. The effort made with those work partners already bore its first fruits.

ZSI Antanandava

It should be recognized openly that farmers' motivation to execute SRI in the area has declined. Casual victims of a fall in rice price in the previous year, the majority of farmers decided not to invest in this "profitable but fastidious culture", as they put it. Nevertheless, owing to adequate supervision by the team members combined with the use of improved seeds, some farmers who were bolder than others obtained a mean yield of 2.96T/ha against 2.3t/ha in the previous year. The use of technique packages is manifest, encouraged by a successful harvest of market-gardening products, the economic viability of potatoes production, the appealing financial profits from breeding, and finally the urgent need for food diversification.

Water supply problems, hard to resolve, persist in this area. The issue of plant diseases is still relevant, despite the many efforts made to eradicate this plague through specific trainings provided to farmers.

Members complain about delays in credit allocation. These repetitive episodes are the main reasons for the loss of motivation of farmers to resort to this system, and their growing reluctance vis-à-vis new initiative proposals.

Environmental activities continue within local associations through afforestation, agroforestry and *lavaka* protection. Furthermore, the local populations who are now aware of the advanced degradation of the surrounding hills, and who are the victims of the impacts of drought and lack of water, are taking an active interest in the management of natural resources in the adjacent forest of Andranomangarika. They already set up a basic community (COBA) for this purpose.

Today, the "*paysans vulgarisateurs*" and "*paysans animateurs*" are in place within Kolo Harena associations and have started their mission. Despite some impediments inherent with new initiatives, the raid for the transfer "farmer to farmer" is on the right track leading to a confirmed professionalization of Kolo Harena associations.

ZSI Lac Alaotra

In general, LDI interventions in the region of Lac Alaotra bore many fruits following a refocusing of activities towards the actual needs of the population. Misunderstood for a long time, all our interventions were concentrated on farming exploitations whereas in actual fact one-half of the population (50%) lived on fishing and craft industry only. Following a periodic participatory assessment, which revealed various more or less controllable disappointments, our supervision activities were refocused towards the actual needs of Kolo Harenas, a decision that restored enthusiasm and dynamism among members. Test motivation activities are no longer demoralizing to members. The latter now recognize the importance of those meetings from which they stayed away for a long time, and attend training sessions without imposition. The success met triggered the dynamic restarting of actions, more active participation among somnolent members and the blossoming of new associations.



Rice yields raised to 14 tons per hectare with SRI techniques

In the domain of agricultural intensification, the rice year 2001-2002 is obviously a very good year for the region of Lac Alaotra. With the arrival of rains during “*montaison*” and “*épiaison*” times, farmers recorded this year one of the best harvests of the last five or six years. From a technical point of view, the SRI achieved little success because of the complicated applications in the handling of delicate and weak seedlings, a costly tenure system and especially the problem of water control. In fact, water is generally insufficient but it can be too abundant sometimes when brought by the pouring rain, despite the existence of appropriate infrastructures put in place by LDI.

The SRA is now well controlled and adopted by local Kolo Harena farmers. The followers of this less demanding technique are much more numerous (90%) compared to those of the SRI. After two years of practice, the expertise is acquired today. Concerning the harvest, incontrollable risks are real, with the last cyclonic rains and the insufficiency of labor. Vintage time was delayed, and such risks may cause a decline in yields and a loss of motivation among farmers in the future.

With regard to cash crops, onion became the leading crop for farmers on east bank of the Lac. Kolo Harena farmers, who experienced consecutive failures in rice growing because of the water problem mentioned above, concentrated their efforts on this crop known to be economically profitable and technically less demanding. Together with fishing, handicraft and breeding, the technique packages contributed to significantly increase revenues in Kolo Harena household purses.

The blossoming of “*paysans vulgarisateurs*” continues. Despite the specific trainings as well as the technical trainings they received, some gaps are mentioned by their peers in the method of communication and their perception of the concept; in effect, the “*paysans vulgarisateurs*” are generally driven by personal motives and put aside their duty towards the association and the community. For their part, the “*paysans vulgarisateurs*” talk about difficulties of adaptation and adoption by the population as regards their initial vocation.

ZSI Ambatovy

Thanks to agricultural diversification, farmers experience today the advantages of an incessant production all the year round, which means a permanent source of money, a substantial increase in revenues and food diversity.

The impacts of the poultry vaccination effort begin to show in the surrounding communities, which make the most of this opportunity where they have everything to gain. The positive impacts are palpable today. Poultry disease cases are less frequent. In addition, as a result of the multiple sessions organized by our technicians, several community members now acquired this competence; therefore we gradually cease calling upon CIREL services.

We also observe a growing interest of local communities in cash crops. Professionalization emerges, and the first elements of a more careful farming method are adopted, i.e. cost-benefit analysis and more detailed technical routes.

We notice a growing number of farmers who are taking keener interest in our associations and become members. Exchanges between farmers are more and more frequent, and a mutualist spirit develops to gradually replace the reflex of information retention.

We observe with satisfaction that the positive impacts of our implementation in the area are visible right now. In effect, an AKH composed of female members exclusively was created recently. The activities proposed aimed at the active participation of members in the development of their locality and the emancipation of female members.

Currently, 40 "*paysans vulgarisateurs*" are in place, and lessons were learned from what has been achieved so far in order to improve the process in the future.

The Federation's maturity is reflected in its empowerment for real professionalism. This is demonstrated in each activity by itinerary development and profit calculation while selecting the most profitable crops.

ZSI Beforona

The ecological ginger is still the leading crop for local households. Thanks to previous harvests, several KH members were able to reimburse past credit debt. The adoption of new techniques expands within KH and non-KH families. In the domain of rice production, the SRA gains ground because of permanent water control problems and the technical and monitoring specificities which have a dissuasive effect on farmers. The yields recorded ranging between 1.5 T/ha to 2.1 T/ha are encouraging and largely exceed the normal yield for this *tavy* crop.

Membership to KH associations and the demotivation of certain members happen frequently. The reasons are multiple but the common basis is the disappointment of members by our method of approach and participation, a new thing for these farmers habituated to the donations and other material profits offered by our predecessors. The situation became worse when certain members proved incapable of reimbursing their credit debt, and consequently no longer attended meetings and assemblies or stayed away each time a visit of our technicians was announced. This situation is taken seriously by associations, which remove from their coalition any corrupt or ill-intentioned member.

In the communication and environmental education component, it is interesting to observe the extent of performances achieved in the domain of health and environment. However, the range of the transmitter is still unsatisfactory since only 13 out of 66 local villages can listen to the radio. Efforts to improve this situation are made in partnership with the MGHC project. Such partnership also covers the establishment of champion communities "*Voahary Salama*" in 10 of our target local villages. Many KH members participate in this initiative and begin to benefit by the advantages of the health and food improvement component thanks to the training sessions and the agricultural and culinary technical support provided jointly by the SAF and LDI.

ZSI BRICKAVILLE/VATOMANDRY and ZSI FENERIVE EAST

Our local Kolo Harena farmers started their activities recently. Yet, they are already taking an active interest in agricultural intensification which will improve their production, in addition to interesting monetary profits generated by new profitable crops, and of course, the advantages of food diversification. It should also be mentioned that an "economic" mentality has emerged, as testified by KH members who select crops based on the lucrative profitability of each activity.

Concerning rice cultivation, KH members are attracted by improved techniques which increase two or threefold the yields obtained by traditional technique, thanks to SRI or SRA technical contribution. Nevertheless, because of water control problems, farmers' preference goes to the SRA, which seems most appropriate to local requirements.

In addition to that, the "agro-ecological" label is important for them. As regards cash crops, a great number of farmers encourage their peers to engage in this direction and to start afforestation with melliferous seedlings while controlling bush fires which were frequent and destructive this year.

In the domain of capacity building, it is currently observed that the establishment of a KHA reinforces unity among members (same objective, confidence). The coalition also promotes experience and technique sharing within the association

The FEDERATION also reinforced solidarity and exchange between several Kolo Harena associations in the region. These factors contributed to develop Kolo Harena associations' capacity of innovation. Besides, the existence the agricultural supply center and the micro-credit scheme promoted attraction and exchanges, as well as mutual confidence through the requirement of the joint and several guarantee.

On the members' side, this opportunity is associated with the need for careful selection of new members of the Kolo Harena associations.

6.2.2 Quantitative analysis

Analysis of Indicators

Summary of LDI 2001-2002 results are shown in the table below:

Indicators 2001-2002	LDI Quantified Objectives	Accomplishments July 01– June 02	Notes on the Indicator
Activity Level			
Agricultural Intensification - increase in production - increase in revenue - allocate credit	- 20% 20% - \$69,281 of which \$32,730 in rural credit and 36,551 in inputs	15% to 535 % augmentation of yields depending on culture. ___% augmentation of revenue - \$5970 new credit disbursed and 6720 from revolving fund. \$ 5943 disbursed for material and ag. Inputs	Data collection in running. Information will be available in July 2002 Due to political crisis, credit distribution in Brickaville, Fénérive and Vatomandry encountered communication and distribution problems. In Lac Alaotra region, the reimbursement rate is still low.
Environmental Education carry out EE&C activities which target the Kolo Harena	3 environmental education activities with communities. - Fully implement the LDI and the regional communication plan	2 executed activities PCR : running process in implementation of CCV, radio broadcast sessions. 7 running activities: - Ecological ginger poster, farmer managed rural radio in Beforona, implementation of village cultural center, transmission of radio spot, video projection, theatre marionette, pagivolte session, zetra fest, school embellishment fairs accomplished by KH members (1 in Ambatovy and 1 in Lac Alaotra), KH days celebration, JME celebration, gully stabilization, watershed protection. Environmental message trial	Outdo objectives. The farmer-managed radio has been running since January 2001. Marionettes and theatres are new activities. The Fetin'ny Zetra activity was a total success and we plan on continuing to support this initiative each year. The rehabilitation activities, such as gully stabilization and watershed protection are obligatory for concerned KH.
Community Management of Natural Resources number of contracts drawn up number of villages concerned in the community conservation number of villages concerned in the sustainable use of natural resources implementation of signed contracts	- 4 contracts - 70 villages 170 villages - 4 contracts	2 contracts signature completed, 5 on-going GCF process activities in Lac Alaotra and Antanandava 81 villages 182 villages 2 contracts	Concerned sites for management transfer are: Belempona : 315 ha, Ambohimiarina : 141.7 ha. The signature of the Ambatofotsy (555.85ha) and Ambatomanga (87.5 ha) contracts will be arranged sooner. Activities are reforestation, plantation of zetra, compost production, protection and stabilization of lavaka, watershed protection, CBNRM, COBA activities. Kolo Harena association are obliged to do these activities Concerned villages are Belempona and Ambohimiarina in SZI of Lac Alaotra
Promotion of EFE number of EFE supported by LDI total investments by supported EFE expenditure of FIEFE funds establishment of commercial relations between EFE and Kolo Harena	- 25 EFE - \$149,250 - \$47,750 - 2,000 farmers	25 supported CE 1745 farmers have commercial relationship with CE	CE concerned are in dried fruit, essential oil production, papaya, rice commercialization, onion, cinnamon, geranium, ecological ginger, silkworm, husking unit, ecotourism and BRP production. 7 new projects: Pepper, oil-works, wood products, husking unit (4). 2 projects are presently financed, 2 projects have received agreement. The remaining files are still at Antananarivo office level. No complementary data since December 2001, due to political circumstance.
Capacity Building Create Kolo Harena associations Work with members of Kolo Harena associations	- 27 new KH associations filles - 1,500 members	291 Kolo Harena of 8,946 members. 8 KH federation of KH in place No union of federation.	LDI gain the trust of communities. The increase is also due to some extent of the opening of our activities in Lovoka and the SZIs in the province of Tamatave. Regular fund : 97 Kolo Harena associations with 1400 members

establish a system of farmer-to-farmer educators	- 70 village animators	- 21 paysans animateurs and 74 paysans vulgarisateurs totalling 95 technician farmers.	COBA : 4 associations for 456 members Cyclone Recovery Program : 190 Kolo Harena associations with 7090 members
Number of Federations of Kolo Harena associations reinforced with capacity-building activities	- 11 junior experts	- 8 Federations of KH - 8 experts junior	These animators and extension farmers are operational and some of them need more specific training
Sub-level Outcomes			
Reduce the expansion of agricultural land in the priority ecosystems monitor the evolution of pressures in the ZSI	4 pilot sites: Ranomena, Ambalavero and Belalitra	No Kolo Harena members in the studies pilot zones are practicing tavy anymore.	Accomplishment in other SZI to be run on august 2002
Increase incentives for sustainable use of natural resource inventory EFE transgressions in the LDI regions evolution of turnover of the supported EFE Number of created job opportunities		17 EFE No data available 1065 job created in december	Those are EFE that came into existence in LDI region without LDI's support: Madakoho, FIMPIMO-gemo, assoc amis 2 lacs, gaim, Volasoa, label CBD, Tsara Aromatika, Soalandy, koperativa MLA, Plantation Lamahoana, Plantation Beando, Biosave-trimeta, MENDRI, Eleveur SA-ICS, Ranomanitra Last data collection not performed due to political circumstance no further data up to now
Reinforce the capacity of Kolo Harenas to undertake sustainable practices number of people using the technique package number of Kolo Harena members who participate in conservation and development activities	- 50% 100 associations	1262 members 55% 113 associations	Data calculation from : Beforona : 42.12 %; Lac Alaotra : 62.43%; Antanandava : 68.1%; Ambatovy : 68.2% giving a mean of 60.21% Activities are reforestation, plantation of zetra, compost production, protection and stabilization of lavaka, watershed protection, CBNRM, COBA activities. Kolo Harena associations are obliged to do these activities
Intermediate Results			
Sustainable Use of Natural Resources incidence of tavy incidence of fire incidence of charcoal production		An extension of the study of pressures in other ZSI will be performed in august 2002.	

Indicators of Agricultural Intensification Activities

It is useful to observe that data available concern information collected long before the end of the crop year. With the blossoming of women Kolo Harena and new memberships, the adoption and use of improved technique packages slightly declined. This is explained by the fact that in the lately created ZSI (Fénérive, Brickaville and part of Vatomandry), activities are at the stage of the establishment of demonstration plots. In addition, it should be mentioned that new members as well as members of new Kolo Harenas were engaged mainly in rice cultivation during this first year, and were encouraged by the opportunities offered by our agricultural supply centers. In the same way, the new orientation of fishing activities in the Lac Alaotra ZSI villages was more or less generalized and approved by many country people. Lastly, the political situation caused some disruptions in the technical monitoring which could not be carried out properly because staff and technical partners were confronted with transport problems. Nevertheless, on the whole, the total surface of farmed lands as well as the number of farmers increased in comparison with past years. The relative increase in the number of Kolo Harena Associations and members (97 IF associations, 25 AUE, 986 FRC) in comparison with their number at the beginning of the program shows clearly that farmers begin to foresee the merits of the landscape approach and the need for a rural organization within the associations. To date, 5828 farmers are members, i.e. their number increased by 51.5% compared with last year. This is an argument which leads us to say that LDI continues to contribute to rural development in Madagascar, and that the mutual confidence which exists between KH and LDI is proven.

We can say that 2001 was a good year for rice growing in the ZSI of Lac Alaotra, Antanandava, Ambatovy, Beforona and Vatomandry. Rains were satisfactory and arrived in time – those were the two major factors of success. In contrast, at the beginning of the year 2002, the arrival of cyclone KESINY was a real disaster, especially for farmers in Fénérive-Est and Brickaville. The cyclone destroyed most of the crops, and spared neither the demonstration plots nor the *tanety* and bottom-land crops. Now, because of political restrictions, no mediation is possible yet in these regions to restart and give new impetus to activities.

The micro-credit scheme continues to stir up simmering discontent among the farmers, despite the discussions engaged so far. Furthermore, the impossibility of traveling to the provincial office of OTIV in Toamasina because of transport problems cooled down our enthusiasm for the settlement of inherent problems. The situation is still far from arousing envy in the Lake Alaotra region. As a consequence, our farmers still find it difficult to venture off a new track which would require additional labor, a greater amount of time and the regular reimbursement of credits. This explains the low financial volume recorded.

As a result of favorable climatic conditions and the technical supervision which is running smoothly now, yields increased by 15 to 535 percent all crops taken into account. An increase in revenues around 20 percent is expected. However, the exact figures will be available only at the end of the crop year and might vary from a region to another.

Indicators for CBRNM activities

This component recorded an undeniable progress which was concretized by the signature of two GCF contracts in the region of Lac Alaotra. Five other contracts should be signed in the near future. Requests come flooding in from communities. Thus, 3 other rural communes in 3 different ZSIs requested our support. The normal progress of the GCF approach in our case depends mainly on the availability of the CIREF agents and the regular attendance (i.e. the quorum is reached) of members of the communal council concerned. The communal council is the body in charge of the approval of the socioeconomic and technical surveys on which the development will be based.

In addition, traditional environmental protection and maintenance activities are now common activities for Kolo Harenas as a result of progressive and effective awareness of members and the whole community of the linkages between environment protection and poverty reduction.

The first phase in tavy monitoring was completed in the pilot areas. The validated approach will be implemented in the other intervention zones by and by, and will involve a more active participation of the local population in the monitoring of pressures and the control of illegal exploitation of natural resources.

Indicators for Community and Environmental Education activities

The activities of the IEC/EE component more or less conform to previous achievements, i.e. radio programs, pagivolve and environmental education sessions in school setting. The impacts are not easily measurable, but we observed an unmistakable interest of participants during video sessions, particularly children. The feedbacks received concerning the journal "Gazety Kolo Harena" are diverse. We can say for certain that Kolo Harena farmers will be actively involved in the production of this exchange and communication journal. Our efforts are focused on developing the level of knowledge of the peasants, teaching and motivation of farmers through posters. A poster on ecological ginger cultivation was disseminated, and comments from farmers will enable us to make the improvements necessary in order to stir up the latter's interest. Currently, LDI is working alone on the concretization of the regional communication plan, after the withdrawal of MIRAY. We also realize activities for the safeguard of the lake resources of Lac Alaotra and its integral protection; and we launched an initiative for its universal consideration thanks to its inscription as a RAMSAR site.

Indicators for Conservation Enterprise Development activities

The majority of above mentioned indicators were reached during first half of the year. The political crisis which prevailed as from December strongly affected the activities scheduled. The business plans developed in normal times as well as the investment plans established for these activities needed many revisions. In the same way, the marketing contracts entered into by Kolo Harena associations and private operators could not be implemented. Surveys of operators revealed new needs, in particular cash needs, as well as problems related to investment security.

Among the projects submitted to financial institutions, four projects were either rejected by the banks, or withdrawn by their promoter. In addition to the political situation, the non-settlement of land ownership problems was the main stumbling block to those projects.

Lastly, it should be underlined that the success met by the FKH of Beforona in selling its ecological gingers to commercial operators motivated the Kolo Harena of Brickaville and Fénérive-Est to engage in this new promising crop.

Indicators of Capacity-Building activities

At the regional level, owing to a marked dynamism of socio-organizers, particularly in the recently open regions in the east coast, the objectives of the year were largely exceeded as for the number of new

associations created. Thus, more than 50 new associations (KH IF, KH FRC, AUE) were set up in Vatomandry and Brickaville, while in the other sub-regions (Lovoka-Lac Alaotra, Antanandava) memberships continue to increase, stimulated by the results achieved and the good reputation of our project. In contrast, a decline was observed in the region of Beforona, a complex region where our actions succeed those of our predecessors whose approach was different from ours, as they were based more or less on research and assistantship. Today, with empowerment effective at the level of the Kolo Harena associations and the Federation, these village associations are now composed of conscientious members, seeking and contributing to the achievement of the authentic objectives of our program. In Fénérive-Est, the initial period was devoted to prospecting and new establishing of associations, which were followed this year by the concrete establishment of associations as well as two AUEs undertaken concurrently with field activities.

The number of COBAs also increased, thus demonstrating the willingness of farmers to take in hands the management of natural resources, and their support to our project's goals.

Tableau de répartition des Entreprises Favorables à l'Environnement appuyées par LDI

N U M	Filières	NATURE DU PROJET	Région	Nom ou Raison sociale	OBJET DE LA DEMANDE	COUT DU PROGRAMME (kFmg)	F I E F E	INSTRUCTIONS	ACTIONS ENTREPRISES PAR LDI	RESULTATS OU IMPACTS ATTENDUS AU NIVEAU DE L' ENTREPRISE	OBSERVATIONS
1	ECO	Implantation eco-lodges	DIE	NATURE LODGE	Demande d'appui pour les études architecturales et EIE	1,686,663	700,000		Etudes Architecturales et EIE terminées. La construction a commencé en respectant les normes environnementales approuvés par l'ONE	Orientation des activités, choix des investissements.	
2	ECO	Implantation eco-lodges	DIE	Sucrerie Bourbon	Visite de site dirigée et Introduction à l'ANGAP pour négociation Ankarana Est.				Client attend la mise en place de la ZIE		Sucrerie de Bourbon attend l'installation de la ZIE pour se prononcer sur ses orientations.
3	ECO	Implantation de cases villageois	DIE	ADA	Demande d'étude de faisabilité et élaboration du document de projet.				Etude effectuée vers le 12 Oct. Attente rapport.		
4	ECO	Construction puits et implantation de cases villageois	DIE	AVE (Ankarana)	Etudes techniques pour les constructions				Etude effectuée vers le 27 Oct. Dossier APD reçu mais nécessite une révision des prix		
5	ECO	Centre équestre	DIE	Pottin Jean Christophe	Demande d'appui pour les EIE de l'introduction des chevaux dans les 2 parcs d'Ankarana et de Montagne d'Ambre						Appui en cours d'étude
6	ECO	Exploitation d'hotel Restaurant	DIE	De Spéville	Ouverture de circuit et aménagement infrastructures			Engager Scott Grenfell		Réhabilitation de la maison en 12 chambres et un restaurant de 30-40 couverts prévue cette année	
7	ECO	Exploitation d'hôtel restaurant	DIE	Fontenay Resort	Appui financier pour l'aménagement de chambres d'hôtel	2,675,000	500,000		Appui au montage du dossier de demande de financement	Ouverture de l'activité hébergement de l'établissement	Dossier en cours de préparation
8					Renforcement de la capacité				Création du comptoir du Tourisme, EJ opérationnel, Formation pour renforcer la capacité des opérateurs locaux en matière d'écotourisme		
9	ECO	Appui à l'association	DIE	ETN							
9	CAF	Implantation d'une unité agro-industrielle pour la valorisation du café, poivre et piment destinés à l'export. Exploitation d'huiles essentielles diverses	FIA	AGROMAN	Demande d'assistance pour une étude de faisabilité technique, économique et financière. Mise en place de deux EJ. Appui pour l'étude de la mise en place de batterie d'alambics à pression atmosphérique et à haute pression	\$120 000		Appui de l'entreprise pour la réalisation des études spécifiées. Un EJ opérationnel. Suivi de la réalisation de l'étude	Montage du dossier de faisabilité du projet (plan d'activités et projections financières avec l'intervention du cabinet Bio Herb et C_Soritra). Recrutement d'un consultant et réalisation de l'étude	Mise en place de la société, décision d'investissement et démarrage des activités	Choix et décision d'investissement en cours de finalisation par les promoteurs.
10	ECO	Extension capacité d'accueil éco-lodges et réhabilitation équipement hydro-électrique	FIA	Domaine Nature	Demande d'appui technique et recherche de financement.	245.971	197.145	Suivi instruction dossier chez Investco et BNI-CLM	Etudes de réhabilitation du système hydro-électrique et montage du dossier de faisabilité du projet (Cabinet Mamokatra et Jary).	Orientation des activités, option d'investissement et amélioration des services à la clientèle.	Dossier transmis à Investco et BNI-CLM
11	ECO	Implantation d'éco-lodges	FIA	GONZALES/GALLET	Demande d'infos diverses pour un projet d'écologie à Isalo & Appui à la reconnaissance sur terrain avec l'ANGAP				Recherche d'informations.	Mise en place de l'écologie	Le promoteur attend la mise en place du ZIE. Tsara Guest et Cortez Travel sont intéressées
12	ECO	Implantation d'éco-lodges	FIA	Lémurie Tours	Demande d'infos diverses pour un projet d'écologie à Isalo.				Recherche d'informations. Appui à l'installation de la ZIE.	Mise en place de l'écologie	Le promoteur attend la mise en place de la ZIE.
13	ECO	Implantation d'éco-lodges	FIA	Sucrerie Bourbon	Demande d'infos diverses pour un projet d'écologie à Isalo				Client attend la mise en place de la ZIE	Mise en place de l'écologie	
14	ECO	Implantation d'éco-lodges	FIA	HFF	Demande d'infos diverses pour un projet d'écologie à Isalo & Appui à la recherche de consultants pour les EIE et E. Architecturales				Recherche d'informations et appui à l'installation de la ZIE d'Isalo.	Mise en place de l'écologie	HFF attend la mise en place de la ZIE.
15	ECO	Implantation d'éco-lodges	FIA	M/CAR AIRTOURS	Demande d'infos diverses pour un projet d'écologie à Isalo				Recherche d'informations et appui à l'installation de la ZIE.	Mise en place de l'écologie	Le promoteur attend la mise en place de la ZIE.

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N U M	Filières	NATURE DU PROJET	Région	Nom ou Raison sociale	OBJET DE LA DEMANDE	COUT DU PROGRAMME (kFmg)	F I E F E	INSTRUCTIONS	ACTIONS ENTREPRISES PAR LDI	RESULTATS OU IMPACTS ATTENDUS AU NIVEAU DE L' ENTREPRISE	OBSERVATIONS
16	ECO	Implantation d'écodolges et circuits touristiques	FIA	CAMP CATTÀ	Appui à la MARP (socio-éco) et aux EIE du projet. Demande de financement pour la mise en place d'un écolodge	1000	800	Appui à la finalisation du dossier de demande de financement	MARP faite en novembre. L'étude a recommandé la création d'un office de Tourisme et la promotion des activités de développement pour la communauté locale. Un consultant fait actuellement l'étude faisabilité du dossier	Mise en place de l'écodolge	Dossier de demande de financement modifier selon les critères du FIEFE
17	ECO	Extension d'écodolge	FIA	CENTREST	Demande d'appui FIEFE pour l'extension de l'établissement			Appui à l'élaboration du dossier de demande de financement, Formation		Amélioration des services, augmentation du chiffre d'affaires	Attente demande effective du client
18	HES	Appui à la filière huiles essentielles.	FIA	COLMAN	Demande d'appui à la promotion de produits sur le marché US. Eventuelle demande de financement du FDR en cas suite à l'extension de la capacité d'extraction.				Appui de LDI pour la promotion de 4 spéculations: Ravensara, Cannelle, Gingembre et Niaouli		
19	ECO	Implantation d'un écolodge à Isalo	FIA	GMT	EIE	9600		EIE			Attente client
20	HES	Promotion des plantes aromatiques	FIA	EPAM	Demande de financement pour la production et la commercialisation des huiles essentielles de ravintsara et de cannelliers	\$433			LDI a appuyé le transport de 22,000 plants de ravintsara et de cannelliers. Le client demande l'appui de LDI pour l'étude de faisabilité de l'implantation d'usine ainsi que l'EIE.		
21	ECO	Rehabilitation de l'hotel	FIA	Hotel Thermal	Assistance technique et recherche de partenaires				LDI intervient seulement lorsque la politique de privatisation de l'hotel soit clarifiée		
22	HES	Promotion de rose de Bulgarie	FIA	Mac&Freres	Assistance technique et recherche de partenaires	\$22,800			1,600 plants de rosiers ont été importés et transportés à Ambohimilaza. Un Expert Junior appuie l'entreprise.		EIE prise en charge par FASP mais attente EIE ZIE
23	FRS	Implantation d'une unité de séchage de fruit à Mananjary	FIA	MBM Sarl	Mise en place d'une unité de séchoir à Mananjary			Etude de marché et de faisabilité litchis et fruits séchés	Manque d'informations auprès du promoteur pour l'élaboration du dossier de financement. En veilleuse		
24	IAA	Fabrication d'emballage pour épices et cartons	FIA	PROIMPEX	Demande de financement et recherche de nouveau partenaire				Dossier en veilleuse.		
25	ECO	Développement de l'écotourisme autour de FCE	FIA	Railbike Tours	Recherche de partenaires				Le protocole de partenariat est en cours de finalisation avec la FCE . Suite à l'arrivée de M. Rhode Michael, fabrication de 3 prototypes en collaboration avec PROIMPEX à Moramanga		
26	HES	Mise en place d'une unité de transformation de fruits dans la région de Manakara	FIA	RAMANANDRAIBE Export	Demande d'appui pour une étude de faisabilité pour ce projet			Recrutement d'un consultant international pour la partie technique	Préparation de protocole d'accord	Prise de décision de la société pour le commencement effectif du projet	
27	FR	Mise en place d'une unité de production de litchis surgelés et de mise en boîte de fruits et légumes	FIA	Ets MALAISE	Appui pour une étude de faisabilité et appui financier			Elaboration préalable de protocole d'accord	Attente renseignements venant du promoteur		
28	FRS	Fabrication de fruits séchés	MAH	Association Vonona	Suivi activités Vonona				Appui technique pour l'amélioration de la qualité des produits et à la commercialisation par un EJ. Appui à la mise en place d'une nouvelle organisation dans la gestion de l'unité. Appui à la participation à des foires.	Amélioration de la qualité des produits. Augmentation du chiffre d'affaire. Ouverture à de nouveaux marchés	Appui à la gestion en cours.
29	IAA	Élevage de tilapia et fabrication de filet destiné à l'export	MAH	Seafood Tradind Compagny	Demande d'appui technique et recherche de financement. Business plan	\$ 500 000		Démarrer l'étude sur l'évaluation du potentiel en Tilapia dans la région de Tsarahasina. Etablissement business plan	Etude du potentiel en Tilapia des régions de Marovoay, Tsarahasina et Ankijabe. Réalisation d'un business plan. Etude pour la mise en place d'un projet de pisciculture de tilapia auprès de KH à Ankijabe pour collaborer avec le projet.	L'intervention à permis de définir une stratégie pour le projet et de faire des recherches de partenariats et de financements qui devraient permettre le démarrage en février 2001.	

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30	JUS/FR	Implantation d'une unité de fabrication de jus de fruits.	MAH	Exofruimad	Demande d'appui à LDI pour l'étude préalable de la filière fruits et légumes (Approvisionnement et marché). Business Plan	1300 FF		Etude de l'approvisionnement en fruits et légumes; Etude du marché des jus de fruits à M/car.	Etude de marché du jus de fruits réalisé par le Cabinet IDC. Rapport livré. Etudes sur l'approvisionnement en fruits dans la région de Mahajanga réalisé par le cabinet EDEN. Réalisation d'un business plan.	Avec un investissement sur fonds propre de 1.300 millions de fmg, les promoteurs vont se lancer dans l'exécution du projet à partir de ce mois de janvier, les matériels de l'usine ayant été déjà tous débarqués. Les premiers essais devraient avoir lieu en avril.	
31	RAPHIA	Appui technique dans le développement de la filière	MAH	Filière Raphia	Demande d'appui à LDI pour l'étude préalable de la potentialité de raphière dans la région et établissement de stratégie pour développement de la filière				Etude sur l'évaluation de la potentialité de raphière dans la région de Mahajanga réalisé par le Cabinet Rconseil incomplète. Une étude complémentaire va être lancée en janvier 2001.		
32	ECO	Aménagement du site touristique d'Anjohibe	MAH	Mikajy/Min Culture	Demande d'appui à LDI sur la réalisation d'une étude d'inventaire des spécificités de la grotte d'Anjohibe et du plan d'aménagement et de gestion du site.				Etude d'inventaire des spécificités de la grotte d'Anjohibe et du plan d'aménagement du site réalisé par GLW Conseil. Rapport livré	Une évaluation du site sera réalisée en avril 2001 pour permettre de définir et de mettre en place les différents comités de gestion.	
33	ENERGIE	Promotion du gaz comme énergie de substitution du charbon	MAH	Vitogaz	Demande d'appui à LDI sur la réalisation d'une étude sur la définition des axes stratégiques pour la promotion de l'énergie de substitution				Etude sur la définition des axes stratégiques pour la promotion de l'énergie de substitution, promotion et sensibilisation des ménages sur l'utilisation du gaz réalisé par ECR. A partir de février une campagne de sensibilisation sur l'utilisation du gaz sera réalisée dans les quartiers par CRS, une campagne de publicité sera réalisée par Grand Angle et un crédit sera disponible auprès d'EAM pour l'acquisition des premiers matériels.	Permettra à VITOGAZ de toucher de nouveaux consommateurs en plus des utilisateurs actuels de gaz.	
34	PAKA	Promotion du paka auprès des Kolo harena	MAH	FITIM	Mise en relation des membres des Kolo Harena avec la société locale de traitement des fibres. Relance ou introduction de la culture de paka dans les ZSI.			Sensibilisation des membres des Kolo Harena	Aucune action		Sensibilisation des membres des Kolo Harena prévue pour l'année 2(à compter d'août 2000)
35	ANACAR DE	Mise en place d'une usine artisanale	MAH	Kalfane & Fils	Etude technique du matériel adapté, étude de marché, business plan.				Recherche d'un consultant du Brésil pour la réalisation de l'étude technique et de la définition de marchés. Voyage en Inde d'un agent de LDI avec le promoteur.		Les actions et l'assistance auront lieu ce premier trimestre 2001
36	ANACAR DE	Promotion, développement de l'anacarde dans la région de Mahajanga.	MAH	Club Cajou	Demande d'appui au développement de la filière				Appel à des consultants pour une évaluation de la situation de la filière et pour une amélioration génétique des souches locale. Mise en place d'un verger de clones améliorés à Miadana. Recherche de consultants pour réaliser une étude sur les possibilités de changements de statut de l'anacarde en produits de rente.		
37	ECO	Implantation d'éco-lodges	MAH	Coquereli Lodge	Demande d'appui pour une étude architecturale, une étude de marché et la réalisation d'un business plan.	1.600 millions Fmg			Identification du site avec le promoteur	A permis le choix du site définitif	L'assistance de LDI se poursuivra quand les promoteurs auront réglé les problèmes fonciers.
38	Hibiscus	Transformation et commercialisation des produits de l'hibiscus	MAH	Homéopharma	Demande d'appui pour la réalisation de tests de transformation de l'hibiscus, demande pour la réalisation d'une étude de marché des produits obtenus.				Réalisation d'un TDR pour la réalisation des tests de production par le consultant Ramanoelina Panja de l'AGRO. Plantation d'hibiscus au CDJA pour approvisionner le projet. Assistance des KH dans les essais de plantation de l'hibiscus		
39	Aloès	Plantation et transformation de l'aloès en vue de l'exportation	MAH	Aloès Madagascar (Nouraly et Homéopharma)	Evaluation des possibilités d'exploitation de l'aloès dans la région de Mahajanga. Identifier un opérateur à appuyer pour cette exploitation et pour un partenariat avec un opérateur sud-africain.			Opérateur local à identifier	Réalisation d'une étude d'évaluation de la situation actuelle de l'aloès et des possibilités de développement par des consultants locaux et un consultant sud-africain.		

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40	GCV	Gestion d'un grenier communautaire villageois	MAH	KH TARATRA	Demande d'appui dans la formation en gestion du GCV, Appui dans la réalisation du dossier de demande de crédit				Formation en gestion réalisée par EAM, dossier et suivi de la gestion réalisée par EAM.	Le KH va pouvoir disposer d'une ressource supplémentaire.	
41	IAA	Unité artisanale de traitement de noix de cajou	MAH	Kalfane	Business Plan et appui financier				Recherche de cabinets de consultants	Mise en place de l'unité	
42	JUS/FR	Implantation d'une unité de fabrication de jus de fruits.	MAH	Exofruimad	Appui financier pour compléter les investissements	919,172	200,000		Appui au montage du dossier de demande de financement	Démarrage de l'unité	Dossier en cours d'instruction à la BOA
43	JUS/FR	Installation d'une unité de transformation de fruits	MAH	SuissScan Group	Recherches d'informations et données sur la disponibilité des matières premières				Fournitures des éléments disponibles dont l'étude sur les fruits dans la région de Mahajanga	Finalisation du business plan pour la recherche de financement	
44	EPI	Production d'épices	MAH	SODEXA	Appui financier pour l'exploitation de production d'épices			Analyse de la demande pour connaître l'opportunité de l'appui	Analyse de la demande		
45	HES	Valorisation de la culture de cannelle. Fabrication d'huiles essentielles.	MOR	Phael Flor	Demande d'appui technique et recherche de marché. Demande de financement d'une unité d'extraction d'HES de cannelle	767.474	227.3	Construction barrage à commencer et a été inauguré en Novembre 2000	1) composante infrastructure: exécutée par ONG Lâlana, 2) EIE barrage, faite et approuvée par l'USAID 3) Sécurisation foncière: travaux topographiques sur terrain en cours 4) Présentation du projet aux autorités locales le 1/12/99. 5) business plan finalisé et présenté à la BNI-CLM 6) barrage réceptionné provisoirement et inauguré le 30/10 7) Refinancement du prêt sur FIEFE	Augmentation chiffre d'affaires après obtention du FIEFE. Implication des paysans	Actions déjà entreprises en faveur de Phael Flor : recherche de marché aux USA (voyage d'étude financé par LDI), EIE, étude topographique et de parcellisation. Réalisations fortement menacées par la conjoncture politique
46	ECO	Extension des activités d'un hôtel restaurant à Andasibe.	MOR	MENDRI	Demande de financement.	1,021 milliards Fmg	532 millions Fmg	Valider le dossier présenté par le promoteur	Recommandations sur le plan d'ensemble du projet et l'aspect architectural par un expert (P. Ozolin). L'étude architecturale est faite, ainsi que l'EIE. Le dossier est en cours d'instruction à la BTM-BOA	Reajustement des besoins d'investissements et des projections financières.	Dossier refusé à la BMOI, issue incertaine à la BTM-BOA
47	HES	Promotion, développement et exportation des huiles essentielles; Relance de la filière girofle dans la région de Fénérive Est	MOR	BIOSAVE	Demande d'appui à la recherche de marché. Demande de financement pour l'augmentation de la capacité de production. Détermination de types d'alambics adéquats pour le girofle feuilles dans la région	362,902	242,902	Appui à la recherche de marché. Appui au montage du dossier de financement. Etude de types d'alambics pour les girofle feuilles	Voyage d'étude aux USA à Purdue University. Essais de différents types d'alambics pour le girofle. Dossier présenté à la BOA	Extension du marché, amélioration de la qualité et diversification des produits. Augmentation de la production. Adoption d'un type d'alambic performant pour le girofle feuille	Crédit accordé à la BOA, déblocage en cours
48	FRS	Extension et amélioration de la capacité de production de l'unité de séchage	MOR	Association Fitamihavo Ranomafana Est	Demande d'appui à la gestion et à la commercialisation par le moyen d'un EJ			L'association Fitamihavo et la société TAF sont en relation commerciale	La collaboration est en veilleuse due à l'insuffisance de l'offre de Fitamihavo sur la demande exprimée par TAF		En veilleuse
49	ECO	Aménagement d'infrastructure écotouristique dans la région de Ranomafana Brickaville.	MOR	Association Fitamihavo	Demande d'appui pour l'évaluation des potentialités écotouristiques des sites et demande de financement pour le financement des investissements.				Partenariat en sommeil dû à la confusion de protocole de partenariat avec CEAS. L'appui sur la recherche de débouché a pu être réalisé. Une réunion de contact en vue de partenariat avec Vatomanga pour la filière papaye a été organisée par LDI.		En veilleuse
50	Plantes Médicinales	Exportation de diverses plantes médicinales.	MOR	LT EXPORT	Appui à la recherche de marché.				Recherche de marché aux USA. (cabinet HRF). Etude réalisée	Extension de marché.	Rapport diffusé auprès des opérateurs
51	BIO	Projet d'extraction de papaye destinée à l'export.	MOR	VATOMANGA	Demande d'appui pour l'évaluation du système d'irrigation et l'encadrement des Kolo Harena à produire de la papaye. Demande de financement des investissements d'exploitation	1200	850	Elaboration du business plan et appui dans l'étude technique	La mission de reconnaissance des sites a eu lieu. LDI négocie la contribution du promoteur dans la réalisation des études. Le volet crédit est important pour financer la plantation paysanne. Conventions entre LDI/Vatomanga et Vatomanga/Kolo Harena en cours. Retard de financement de OTIV. Elaboration business plan	Fonctionnement effectif du projet et implication des paysans	Dossier refusé à la banque du fait de la situation financière de la société. 15 Ha de plantation de papayers mal exploités

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52	HES	Appui à la filière huiles essentielles.	MOR	Le DAMA	Demande d'appui à la promotion de produits sur le marché US. Demande de financement			Calidation dossier de financement	Recherche de marche. (intervention de HRF).	Extension du marche et amelioration de la qualite des produits.	Rapport diffusé auprès des opérateurs
53	HES	Appui à la filière huiles essentielles.	MOR	Dr. Jonis Solofo SA	Appui accès FIEFE, EJ, Relation avec Kolo Harena				Promoteur non sérieux. Dossier rejeté et classé sans suite suite à des recoupements dans la même filière		
54	BIO	Appui à la régénération de pygéum	MOR	PRONATEX	Appui à la régénération de pygeum avec les Kolo Harena d'Ambatovy ZSI			En collaboration avec Phelps Dodge, LDI sensibilis les Kolo Harena	Collecte d'informations sur le pygeum. Préparation outils IEC en vue d'organiser semaine de reboisement coummunautaire de pygéum. Cette séance sera réalisée à l'occasion de la journée de l'arbre	Maîtrise du processus et régénération du pygeum par la société et les paysans	
55	RIZ	Relance culture de riz	MOR	MADRIGAL	Encadrement technique des Kolo Harena pour la production de riz vendu exclusivement a Madrigal				Convention de partenariat LDI/Madrigal/Kolo Harena signé par les 3 parties (AUE/Kolo Harena de Lac Alaotra et Antanandava, Madrigal et LDI)		
56	ECO	Projet de gîtes de passage à Andasibe	MOR	Alasoa Ecotourisme	Appui financier pour la mise en place du gîte . Appui au montage du dossier	506,911	342,411	Finalisation du dossier de financement	Recrutement d'un consultant pour l'élaboration du dossier de demande de financement	Installation du gîte	Situation foncière non régularisée
57	FRU	Installation d'une unité de préparation de litchis	MOR	SPIC	Appui financier et montage du dossier			Lancement de l'élaboration du dossier de financement	Recrutement de cabinet pour le montage du dossier de financement	Obtention du financment et montage de l'unité	Dossier abandonné suite désistement partenaires sud-africains
58	POI	Extension d'une plantation de poivrier à Ilaka Est	MOR	BIO PLUS (ex-Cap du poivrier)	Appui financier pour l'extension de la plantation	611,295	400,000	Appui au montage du montage du dossier	Recrutement de cabinet pour le montage du dossier de financement	Extension de la plantation	Dossier en cours d'instruction à la BNI-CLM
59	PEN	Filière penyj	MOR	Filière Penyj	Etude de la filière penyj dans la région de Brickaville				Préparation de l'etude de la filière	Implication des KH dans la filière penyj par l'obtention de débouchées	
60	GIN	Achat de gingembre séché auprès de KH	MOR	Biolandes	Etude du séchage du gingembre dans la région de Moramanga				Recrutement d'un consultant pour la réalisation de l'étude en considérant le cas du séchage solaire et du séchage au gaz	Achat de gingembre auprès des KH à prix de revient raisonnable	
61	HES	Site de production d'huiles essentielles et d'épices à Fénérive Est	MOR	Les Plantations de Mondésir	Appui financier pour la mise en place de la base de productin d'huiles essentielles et d'épices	1,401,500	325,000		Présentation du dossier à Investco et refinancement du projet	Fonctionnement effective de la base	
62	HES	Extension d'une plantation et production d'huiles essentielles de géranium à Ambatondrazaka	MOR	Ranomamitra	Appui financier pour l'extension de la plantation et l'acquisition d'equipements	591,433	350,000		Conseils sur le montage du dossier et présentation du dossier à la banque pour le FIEFE	Augmentation du chiffre d'affaires	
63	HES	Extension d'une plantation et production d'huiles essentielles de géranium à Ambatondrazaka	MOR	Tsara Aromatika	Appui financier pour l'extension de la plantation et l'acquisition d'equipements	475,840	210,000		Conseils pour le montage du dossier	Augmentation du chiffre d'affaires	
64	ECO	Mise en place d'un établissement hôtelier et de repos à Ambila	MOR	Homéopharma	Etude de marché et architecturale				Engagement d'un consultant pour l'étude de marché	Connaissance du volume du marché attendu pour définir la taille de l'établissement	Etude de marché réalisée
65	HES	Extension de la capacité de production	MOR	Homéopharma	Appui financier à travers le FIEFE	Non défini			Etude du dossier	Augmentation de la capacité de production	
66	HES	Mise en place d'une unité pilote de distillation d'huile de girofle (feuilles)	MOR	Volaso	Appui technique et financier pour la relance de la filière girofle à Fénérive Est				Protocole d'accord signé, attente finalisation d'essais sur les types d'alambics	Adoption de modes d'exploitation plus performantes mais respectant l'environnement dans l'exploitation du girofle dans la zone	Projet affecté par la crise
67	HES	Promotion du gingembre dans la région de Moramanga	MOR	Label CBD	Demande de collaboration pour des essais de distillation de gingembre en vue de leur achat aux KH				Protocole d'accord signé et lancement des essais	Achat de gingembre auprès des Kolo Harena	
68	FOR	Exploitation forestière	MOR	Fanalamanga	Appui pour l'établissement d'un plan d'exploitation			Recrutement d'un consultant international	Termes de référence en cours en vue de la réalisation du plan d'exploitation	Obtention de nouveaux partenaires pour relancer la société	Attente disponibilité de Fanalamanga
69	BIO	Production d'oignons pour l'exportation	MOR	Eleveur S.A - ICS	Recherche de partenariat avec associations paysannes pour la production d'oignons			Appui socio-organisationnel de la Federation d'Ambatovy paysanne.	Intermediation dans la finalisation d'un contrat ferme Encadrement et organisation	Production de 100 tonnes d'oignons de qualite exportation.	Un contrat ferme signé et 6 Ha de plantation auprès 8 AKH

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N U M	Filières	NATURE DU PROJET	Région	Nom ou Raison sociale	OBJET DE LA DEMANDE	COUT DU PROGRAMME (kFmg)	F I E F E	INSTRUCTIONS	ACTIONS ENTREPRISES PAR LDI	RESULTATS OU IMPACTS ATTENDUS AU NIVEAU DE L' ENTREPRISE	OBSERVATIONS
70	HES	Developpement plantation modele en culture de rente	MOR	Plantation BEANDO	Appui Elaboration business plan Acces au FIEFE			Recours à un Cabinet pour élaboration business plan	Appui dans elaboration business plan	Promotion agriculture durable et transformation locale	Business plan remis au promoteur. Projet affecté par la crise
71	HES	Developpement plantation modele en culture de rente	MOR	Plantation LAMAHOANA	Appui Elaboration business plan Acces au FIEFE			Recours à un Cabinet pour élaboration business plan	Appui dans elaboration business plan	Promotion agriculture durable et transformation locale	Business plan remis au promoteur. Projet affecté par la crise
72	SER	Introduction muro - sericiculture dans la zone d'Ambatondrazaka	MOR	Kaoperativa Mpiompilandy Lac Alaotra	Assistance a l'etude de faisabilite de mucroculture et sericiculture Formation en elevage de vers a soie			Etude de faisabilite des activites sericoles dans la region	Test de mucroculture en milieu paysan dans la ZSI d'Antanandava. Test de séríciculture dans le ZSI du Lac Alaotra	Faisabilite de l'elevage de vers a soie.	600 plants de muriers en ages d'exploitation auprès des membres de la coopérative.
73	SER	Promotion muro - sericiculture dans la zone d'Andaingo	MOR	SOALANDY	Financement pour la mise en place d'une unite sericicole et pour la conduite d'une operation sericicole paysanne			Verification des realisations actuelles de l'entreprise. Etude de faisabilite de la sericiculture dans la region	Assistance technique dans la conduite de mucroculture et appui en test d'elevage de vers a soie Test de mucroculture en milieu paysan dans la ZSI- Ambatovy	Extension de l'unité sericicole existante et promotion de l'elevage de vers a soie aupres des paysans de la zone	3 tets d'elevage et 20000 plants de muriers realises au niveau de l'entreprise 13200 boutures mise en pépinière par 14 AKH d'Ambatovy
74	FOR	Gestion durable des ressources forestieres	MOR	Phelps Dodge (P.D.M)	Appui d'un Expert Junior Offre pour la production de BRF en vue rehabilitation forêt d'Ambatovy-Analamay			Mise à disposition d'un E.J. Implication des Communautés villageoises dans le projet.	Mise en disposition d'un E.J pour élaborer un plan de gestion participative de la forêt. Organisation des communautés d'Ambatovy pour promouvoir la production et l'utilisation de BRF.	Valorisation des ressources naturelles et implication des paysans dans la gestion participative de la forêt dans la zone tampon.	Trois contrats de production de 6500 m3 de BRF pour une valeur totale de 195 Millions de fmg executes. Plantation par la Fédération AKH d'Ambatovy de 1,2 tonnes de graines pour agroforesterie.
75	HES	Production HE et agriculture bio	MOR	GAIM	Recherche de partenariat et débouché			Informations continues des membres sur les diverses opportunités	Information prix HE sur le marché et des visites/foires	Developpement activités des membres	
76	ECO	Elaboration Plan d'Aménagement d'un site écotouristique	MOR	Association Amis 2 Lacs	Demande DMS et A.T	300		Dossier à instruire	Réunions avec promoteurs et clarification dossier	Valorisation et conservation site touristique Manambato Rasoabe	Instruction du dossier reportée après la crise
77	BIO	Exploitation intégrant élevage et agri-bio	MOR	Fimpimo-Gemo	Assistance technique en formation			Information des opportunités de formation auprès CDIA et autres	Informations des opportunités de formation auprès CDIA et CIREL	Professionalisation des membres du groupement	Dossier en cours
78	BIO	Exploitation intégrant élevage et agri-bio	MOR	Madakoho	Assistance technique et financieree dans culture gingembre écologique				Invitation aux sessions de formation sur culture de gingembre écologique	Diversification activités actuelles	Dossier en cours
79	FOR	Extraction de gomme à partir de la résine de pins	MOR	PROIMPEX Agro industries	Recherche de partenaires financiers et demande de financement	787,500	615,000	Etude à mener avec le dossier Fanalamanga	Termes de référence finalisés	Obtention de nouveaux partenaire pour l'exploitation	
80	HES	Appui à la filière huiles essentielles.	TNR	CNARP	Demande d'appui à la promotion de produits sur le marché US.				Voyage d'etude aux USA a Purdue.	Formation en cascade a l' ensemble des operateurs de la filiere HES regroupés au sein du SYPEAM	Restitution voyage réalisé.
81	HES	Appui à la filière huiles essentielles.	TNR	EAA/Mc DO	Demande d'appui à la promotion de produits sur le marché US.				Recherche de marche aux USA.(intervention de HRF).	Diversification des activites et recherches de marche.	Rapport diffusé auprès des opérateurs
82	HES	Appui à la filière huiles essentielles.	TNR	HOMEOPHARMA	Demande d'appui à la promotion de produits sur le marché US.				Recherche de marche aux USA.(intervention de HRF)	Diversifications des activités.	Demarrage de la collaboration a Mah concernant l' hibiscus.
83	HES	Appui à la filière huiles essentielles.	TNR	ITD	Demande d'appui pour l' acquisition de materiels de fabrication de balles de paddy.				Exploitation pas dans la zone d'intervention de LDI		
84	HES	Appui à la filière huiles essentielles.	TNR	EXPAM	Demande d'appui à la promotion de produits sur le marché US.				Appui de LDI pour la promotion de 4 spéculations:Ravensara, Cannelle, Gingembre et Niaouli		
85	Bio	Certification biologique	TNR	Qualite France	Demande d' appui pour l' ouverture d' une antenne a M/car			Mettre en place une representation de Qualite France a M/car	Négociation abandonnée	Installation de l'antenne à Madagascar	

Tableau de répartition des Entreprises Favorables à l'Environnement appuyées par LDI

N U M	Filières	NATURE DU PROJET	Région	Nom ou Raison sociale	OBJET DE LA DEMANDE	COUT DU PROGRAMME (kFmg)	F I E F E	INSTRUCTIONS	ACTIONS ENTREPRISES PAR LDI	RESULTATS OU IMPACTS ATTENDUS AU NIVEAU DE L'ENTREPRISE	OBSERVATIONS
86	Bio, EPI, HES	Redynamisation du secteur des produits naturels	TNR	PRONABIO/SYPE AM	Mise en place d'EJ; DMS pour matériel informatique, Appui technique pour la mise en place de label "produits naturels de Madagascar" et participation à une exposition à Washington			Suivi recrutement EJ; DMS matériels informatiques à préparer	Recrutement EJ	Redynamisation de la filière des HES et des produits naturels; obtentions de nouveaux marchés à l'extérieur	
87	Bio, EPI, HES	Mise en place du label produits naturels de Madagascar	TNR	PRONABIO/SYPE AM	Demande d'appui pour la mise en place du label			Collaboration avec l'université de Rutgers et les compétences locales. Elaboration des cahiers des charges; étude sur l'aspect juridique			
88	SER	Extension d'une ferme séricicole	TNR	SIS	Demande d'appui financier			Mise en relation avec les régions pour une éventuelle collaboration avec les Kolo Harena de Fianarantsoa et de Moramanga	Recrutements de consultants et prestations des laboratoires; collaboration avec l'université de Rutgers		
89	ART	Association de 18 sociétés dans le domaine de l'artisanat	TNR	Madagascar Magic Fingers	Demande d'appui pour l'élaboration d'un plan d'action			Recrutement de consultants pour l'élaboration du plan d'action	Plan d'action réalisé	Conquête de nouveaux marchés et pérennisation de sources de revenus supplémentaires pour les paysans dans l'approvisionnement en matières premières	

SUMMARY OF PARTNERS' ACTIVITIES
July 2001-June 2002

Fianarantsoa

Partners	Areas of collaboration	Situation in June 2002
FCE	Privatization process for railway, creation of regional transport integration policy between Port of Manakara and FCE, ecotourism promotion, and capacity building for improved financial management.	Privatization/mise en concession strategy approved by Ministry of Transport, regional transportation study completed, World Bank financing attained for rehabilitation of railroad and port, computer accounting and inventory system functioning, land contract inventory and integration into computer accounting system completed. Michelin train now operational.
AGERAS/CMP:	protocol agreement on the coordination of development projects from different actors in LDI's SZI, on the institutional capacity-building of CDC (Comité de Développement Communal) and on on-going information exchanges.	Protocol agreement signed.
COFIL/WWF/MICET/AN GAP/MIRAY :	Rapid Biological inventory in the corridor in order to generate scientific information needed by policy makers	The first assessment study in Manambolo has been done. Restitution of inventory preliminary results in the first site by COFIL (Comité de Pilotage) for different authorities and development actors in Fianarantsoa. Financial contribution from LDI: \$10,000 for research equipment.
COFIL/PDFR (Plan Directeur Forestier Régional):	institution of a pilot community management program for pine plantations in Haute-Ranomainty through funding from Swiss funded POLFOR program.	Final report completed.
ANGAP/Isalo National Park :	<ul style="list-style-type: none"> - establishment of the <i>plan d'aménagement</i> of the Isalo ZIE (Zone for Investments in Ecotourism) - Rehabilitation of roads heading to ecotourism sites around the park - Rehabilitation of the Centre d'Interprétation 	The land reserve established, the Environmental impact assessment completed, the plan d'aménagement finalized. Through LDI funding, NGO Lalana is controlling the rehabilitation tasks. Road rehabilitation completed.
Association Tefy Saina :	dissemination of SRI techniques and the aménagement of low-lands and hillsides in 15 terroirs (750 farmers) for 21 months.	Increase of rate adoption of market-gardening crop, tanety rehabilitation and off-season crops. Few results in 4 terroirs Tanala. Contract completed in 2001.
FFF Malagasy Mahomby :	Contract about institutional capacity-building of farmer organizations and technical support to production increase and to improvement of community's living conditions.	Contract completed in 2001.
MICET:	Training in market-gardening, agroforestry, fire-break and environmental education with Jeunes Kolo Harena. Identification of dinas agreement in the fokontany and terroirs	Large adoption of market-gardening crop, crops on tanety and off-season crops although on small areas.
BTM/BOA :	setting-up of a rural credit system, Community Granary Storage (CGS) and labor loan with Kolo Harena	Animation- sensitization of Kolo Harena about the credit mechanism and CGS. Credit of 12 millions Fmg granted.

EAM, Entreprendre à Madagascar :	setting-up and management of agricultural input supply center and rural credit system	Credit of 55 millions Fmg granted.
EASTA Iboaka, and CCD Namana :	Technical and economic feasibility study of improved management of collective and individual eucalyptus plantations	Market study done by EASTA Iboaka and Peace Corps. The Expert-Junior is in charge of reinforcement of beneficiaries' capacity-building (including the commune) in the management of plantations. RRA study on the situation of land ownership and other topics around the woodlots.
Direction des Eaux et Forêts, CMP :	Establishment of a program for participatory management of forests in the commune of Ambohimahamasina, Ikongo, Alatsinainy-lalamarina, and Miarinarivo	7 contracts under signature.
CCD Namana :	Implementation of agricultural intensification and conservation program in Ambohimahamasina. Preliminary study of one irrigation system for 60 ha of ricefields	62 KH involved in SRI (566 adopting members), potato growing (168 members), market-gardening crop (125 participants)
CIRAGRI :	Training in leveling contours, hillsides rehabilitation and potato growing during dry-season	Interventions in the southern corridor completed.
GRP :	Group of Rural Promotion , setting-up and management of 3 input supply centers	More than 60% of grant allocated to the centers. Turnover of 22 millions Fmg in 2001. Contract canceled.
FOFIFA	training in establishment of coffee nurseries	38 coffee nurseries created by 80 farmers trained in recépage and plantation maintenance.
CIRPH Manakara :	technical assistance on fish farming	Training on the construction of fishponds and fingerlings rearing in 69 farmers in 5 villages.
CAF :	Community Forest Management, commercialization of wood and forest products, agricultural intensification and zoning of village terroirs	The agricultural intensification activities and CE such as SRI techniques, coffee planting, composting, fish culture and beekeeping are completed. 2 GCF contracts on-going.
Parc National Andringitra :	support to the comité de pilotage for developing ecotourism in the region.	Funding of trails Sahanambo-Pic Boby approved. Establishment of ToR of a jurist expert to analyze land tenure security for investment in ecotourism. Dossier in standby.
AIDE :	Follow-up and training of farmers in agricultural intensification activities in Miarinarivo, Sendrisoa, Alatsinainy-lalamarina.	A range of agricultural activities involved more than 800 farmers. Adoption rate of activities close to 50% in general.
Association MIRAY	Follow-up and training of farmers in agricultural intensification activities in Sendrisoa	Deliverables on follow-up of composting, off-season crops, and SRI activities approved. Contract completed.
Miraimahefa	Technical training in fish farming	Recycling training in the construction of fishponds and the reproduction of fingerlings in 4 sites.
ATEI	Training and technical assistance in SRI/SRA	Training in rice genetic for 116 farmers of Tolongoina and Ikongo. Technical follow-up to 34 farmers doing SRI on 1.95 ha in 2001. Contract completed.

Haona Soa	Organization and facilitation of the meeting between Kolo Harena and EFE	4 shows of interests and commercial agreements in the purchase of crops (manioc, corn, <i>soja</i>), fruits, spices (ginger, cinnamon, curcuma), <i>ramy</i> resin, fish, honey and coffee from the Kolo Harena.
CIADRM	Follow-up and training of farmers in agricultural intensification activities in Tolongoina.	310 members supported in the regeneration of cash crops following the coffee price dumping.
CEP	Follow-up and training of farmers in agricultural intensification activities in Ikongo.	395 members trained in improved agricultural techniques.
Groupe FALAFA/AGECO	Puppet shows on topics related to integrated activities of agricultural intensification, community based natural resources management and health	Puppet shows organized in 4 sites and attended by more than 200 Kolo Harena members.
Groupe TSIDIKA	Presentation of theatres concerning the promotion of Community Granary and production of film on the <i>gestion de terroir</i> approach.	Presentations in Tolongoina and Ikongo. Film being finalized.
FANOITSA	Production of film on fish farming in 2 sites.	Film distributed to more than 300 Kolo Harena in 4 sites.

MORAMANGA

Partner	Object of the collaboration	Category of the activity	Situation in june 2002	Comments and observations
Office Engineering	Control of the cleaning out of Ambohimiarina drain.	IA	Completed work	Perimeters used for the first time in 6 years. They were very interested in the plantation of vetiver grass as a technique to protect irrigation canals. The partners work in very participatory manner.
Orintsoa Building	Cleaning out of Ambohimiarina drain	IA	Completed work	
EGECORAM	Antsahambary dam and irrigation system rehabilitation	IA	Completed work	Medium performance due to administrative problem
ERASTMA	Antandromby II dam construction	IA	Completed work	Average performance due to administrative problem
EGECA	Lovoka dam and irrigation system rehabilitation	IA	Completed work	Satisfactory performance, fast and effective intervention
GROUPEMA	Antsahambary dam and irrigation system rehabilitation	IA	Completed work	Mixed performance due to administrative problem. Satisfactory work deliverable.
E/se RAMAROJAONA	Lovoka irrigation system rehabilitation	IA Road construction	Completed work	Slow proceeding in work execution and quality of work deliverable to be improved. Poor result, unsuitable means.
ONG AKAMA	Agroforestry, nursery and plantation for watershed protection	IA	Completed work	Mixed performance due to unsuitable means. Satisfactory results at the end.
CIREL	Small animal husbandry	IA	Completed work, waiting for the next collaboration.	Satisfactory performance, however a breach in the collaborative effort because of budget restrictions.
Mr FIDELE, PAECC/MPE 10	Small animal husbandry	IA	Completed work	Doubtful startup, improvement after discussions and advice from LDI and KH.
TANIMAITSO	Ag intensification, off-season crops	IA	Completed work	Satisfactory performance, reliable partner for future actions
E/se ZINA	Test and fabrication of agricultural tools	IA	Work in progress	No feedback raised
Madrigal	Commercial aspect in rice production	IA	Collaboration stalled	Performance not yet assessed
FID Toamasina	Dam construction in Ambohimarivo	IA	Completed work	Doubtful performance, medium work quality
B.R.L	Rice production and technical advice in ag.	IA	Work in progress	Medium performance, low adoption by the KHs members. Contract is a bit costly
CIRPRH	Fresh water fish production	IA	Completed work	Satisfactory work deliverable
BEMA – Mediascope	Coordination of the rural radio management team in Beforona	IA	Completed work	Mixed results. Contract terminated.
FKH Tongalaza – Association FITARA	Management board of the rural radio in Beforona	IEC	Work in progress	Mixed performance.
BEST	Socio organization. Setting up of agricultural input supply centers	IA	SO in progress. AISC completed	Mixed performance in socio-organization in spite of expensive cost of contract. Poor performance in farm input supply center management. Contract terminated.

CIREF/DIREF/MEF	Lac Alaotra marshland management.	CBRNRM	2 contracts signed. 2 contracts awaiting closure. 3 contracts in progress	Slow proceedings by the administration to the contract signature. Application of the contract contents doubtful.
MEF	Zahamena forest watch.	CBRNRM	MOU 'LDI-MEF-ANGAP-FARITANY office' established.	Materialization hard to come. Collaboration on stand-by
DURELL	Fetin'ny zetra realization. Implementation of Ramsar Site in Lac Alaotra Lac Alaotra marshland management.	CBRNRM IEC	Fetin'ny Zetra periodically organized. Lake Alaotra designated as RAMSAR site	Reliable partner for future actions. However doubt remains concerning the staff members capacity and approach to communities. A common language on LDI objectives needs to be established. Impacts of intervention to be assessed
MAC DONALD	Revival of coffee cultivation in the region of Beforona and Ambatovy.	IA	Completed work	Supervision of farmers on coffee cultivation needs to be reinforced. Work deliverable not yet submitted. Service a bit expensive.
SAF / FJKM	Setting up of management committee for the CDIA. Integrated health and environment activities	IA	Completed work	Managerial and financial capacity of SAF has improved. Health and environment activities are doing well so far. Further negotiations are necessary.
ONG LALANA	Various studies of existing village irrigation infrastructure.	IA	Work has been hanged.	The service cost is too expensive.
ONG AGATE	Feasibility study of two dams at Ambatovy	IA	Work stalled.	Waiting for the renewal of interest on behalf of the partner.
FITAMIHAVO	Dried fruits and bee keeping with the Kolo Harena.	EFE IA	Activity stalled	Difficulty perceived among members and association leader. Correspondence with LDI is on stand by.
CJPM	Production of BRF and training of farmers.	IA	Finished work.	The farmer association for BRF production and management is set up.
ONG Ramilamina	Technical training on small animal husbandry techniques.	IA	Accomplished work	No correspondence anymore.
CIRAGRI Moramanga	Training and supervision of farmers on SRI / SRA.	IA	Completed work.	Profitable collaboration for Kolo Harena as they obtained outstanding results with the SRI techniques. Collaboration ceased due to accounting problems
PRONATEX	Pygeum cultivation in Ambatovy.	EFE	Work in progress.	After an initial set-back due to partner managerial skills, the collaborative work is well functioning.
PHAEEL FLOR	Cinnamon cultivation and essential oil extraction, research of potential markets abroad.	EFE	Work on standby due to political situation	Oil extraction unit moved out of the site
Women groups of Antanandava	Villager-managed campsite at Antanandava	Ecotourism	Completed work.	Training on functional and local cooking for the members organized with the local PCV.
VOLISOA	BRF production at Ambatovy. Diversification to fish raising	IA, EFE CBRNRM	Completed work.	The commercial organization of the farmer association is operational.
TAF	Marketing of dried fruits with the collaboration of FITAMIHAVO.	EFE	Activity stalled.	Potentiality of a future collaboration.

GAIM	Organization of AREA and JME, research of market for dried fruits.	EFE	Correspondence on stand by.	Partner on EFE or on ecotourisme.
MIRAY	GCRN, IEC	Diverse	Collaboration on standby	SO3 actors and partnership with CRD and AGERAS CTA-ZE
AGERAS CTA-ZE	Regional action planning.	Regional activities, IEC	Collaboration on standby	Actor and partner in the PEII
PDM	Activities at Ambatovy and Ampitambe	IA, EFE GPF	Collaboration hanged up	Local partner for all our activities. Collaborative agreement not renewed
Peace Corps	Ecotourism at Zahamena, farmer approach, SRI, CDIA, fish culture	IA, IEC, EFE Ecotourism	Work in progress.	Valid partnership up to now
MAMOKATRA	Control of infrastructure realizations	Infrastructure IA	Work in progress.	Satisfactory technical performance in general
SOALANDY	Silkworm culture, silk production	EFE	Testing phase completed	Conclusive test results. Farmers training and technical assistance on hold.
Plantation Mon Désir	Cash crops production, essential oil	IA EFE	Work in progress.	Satisfactory performances up to now.
Ranomanitra	Essential oil	EFE	Work in progress.	Financing documents on hold by the bank awaiting estate papers regularization.
AGRICO	Commercial alliance in fruit tree culture	IA EFE	Collaboration hanged up	Agreement not materialized
MENDRI	Hostelry, Ecotourism	Ecotourism	Work in progress	EIE completed. Financing documents committed to the bank and ONE
BIOSAVE	Essential oil	EFE	Work in progress	Concrete realization hard to come. Financing documents under FIEFE.
ALASOA Ecotourism	Ecotourism	EFE	Work in progress.	Financing documents on hold by the bank awaiting estate papers regularization.
Vatomanga	Papaya culture, essential oil	EFE	Work hanged up	Collaboration not finalized with FIEFE rejected.
BIOPLUS	Black pepper culture and production	EFE	Work in progress.	Financing dossier submitted to bank in good progress
Alphonse	Essential oil in Beando Foulpointe	EFE	Work in testing phase	Financing dossier inquiry submitted to Tana office
Paul Arsène	Essential oil in Lamahoana Foulpointe	EFE	Collaboration on standby	Awaiting renewal of interest on behalf of the partner.
CRS	Development activities in the Vatomandry region.	IA SO	Work in progress	Reliable partner, satisfactory results.
CTHT	Cash crops production training for lead-farmers and TDRs	IA	Work in progress	Reliable partner. Satisfactory performance
ONG Mateza	Development activities arounding of the Zahamena Park	IA, SO CBRNRM	Work in progress	Mixed performance. Awaiting work deliverable submission.
SOATEG	Socio-organization FKH support for AISC management and rural credit dossiers writing-up	SO IA	Work in progress	Mixed performance although capable staff.

Liste des étudiants chercheurs nationaux et étrangers ayant effectués des stages mémoires et recherche au sein de LDI

#	Nom des étudiants/chercheurs	Thèmes de recherche	Etablissement d'origine	Lieu
1	Erika STYGER	Evaluation of the domestication potential of useful woody rainforest species in the eastern region of Madagascar Sustainable upland farming systems development in the eastern region of Madagascar Fireless Upland Management in Eastern Madagascar	CORNELL UNIVERSITY	Beforona Moramanga
2	RAZAFIMAMONJY Noroseheno Laetitia	La production de compost	ESS Agronomiques	CDIA Beforona Moramanga
3	RAOBELISON Fidy Denis Eric	Le SRI : dégradation des matières organiques sous le climat régional	ESS Agronomiques	CDIA Beforona Moramanga
4	RAKOTOMANANA Mandimbisoa Salohy	Le petit élevage	ESS Agronomiques	CDIA Beforona Moramanga
5	RAKOTOARINORO Andriamahazo Rijaso	Le SRI : faisabilité technique et économique	ESS Agronomiques	CDIA Beforona Moramanga
6	ANDRIAMADY Voahangy Tahiana	Accroissement de la fertilité par l'utilisation de lombricompost	ESS Agronomiques	CDIA Beforona Moramanga
7	ANDRIAMAROSOA Mick Richard Finidy Nasandratra	Relance de la culture de sésame comme culture à destination alimentaire de Beforona	ESS Agronomiques	CDIA Beforona Moramanga
8	Andry Najoro Solofodimbiniaina ZAFIMAHATRADRAIBE	Relance de la culture de basilic grand vert dit Pitsou pour la production d'huiles essentielles	ESS Agronomiques	CDIA Beforona Moramanga
9	RAZAFIMBELO Tantely Maminiana	Effet de compost sur le gingembre	ESS Agronomiques	CDIA Beforona Moramanga
10	Joely BARISON	The uptake and the use of nutrients by rice in the intensive rice culture (SRI) of Madagascar	CORNELL University	CDIA – Lac Alaotra – Antanandava – Antsirabe – Fianarantsoa
10	Oloro V. McHUGH	Water requirements and Nutrient dynamics for the SRI	CORNELL University	CDIA – Lac Aaotra – Antanandava
11	Christine Michelle MOSER	The Adoption and Disadoption of the System of Rice Intensification: Understanding the Constraints Farmers Face	CORNELL University	CDIA – Lac Alaotra - Fianarantsoa
12	Benjamin David NEIMARK	Vegetative Propagation Strategies of Tropical Agroforestry Trees in Madagascar	CORNELL University	CDIA – Beforona – Ambavaniasy
13	Bryan W. DAILEY	The Ecology of <i>Prunus Africana</i> and its Implications for Biodiversity Conservation in Madagascar	CORNELL University	CDIA – Ambatovy – Forêt de Zahamena - Antanandava
14	Nico Suzanne DAUPHINE	Herbaceous Medicinal Plant Trade and Extraction Habitats in Eastern Madagascar	CORNELL University	Moramanga – Fianarantsoa
15	Pierre KISTLER	Condition et stratégie pour un développement durable dans les zones de culture sur brûlis en forêt tropicale	Université de Berne – Instit géographique – CDE	Beforona – Moramanga
16	RAKOTONDRAZAKA Harimana Mamy	GCF Zetra Lac Alaotra	ESS Agronomiques	Lac Alaotra
17	RAZAFIMANDIMBY Lanto Andriantsara	Culture de Mûriers	ESS Agronomiques	Lac Alaotra
18	Tsrintseho RANAIVOARIMANALINA	Analyse du réseau de communication en milieu rural	ESS Agronomiques	CDIA – Beforona
19	Simon Michel NAMBENA	Régionalisation	ESS Agronomiques	Falaise Est Madagascar
20	Fanja Natacha RAKOTOHAROSOA	Arrière effets du compost sur le gingembre et l'utilisation de l'HYPERBARREN	ESSA	CDIA Beforona
21	Johary Lala ANDRIANASOLO	SRI	ESSA	CDIA Beforona
22	Léa RAOLIARIVELO	Décentralisation	EES lettres	CDIA Beforona Moramanga
23	Samoela RAKOTONARIVO	Riz pluvial avec et sans brûlis	ESSA	CDIA Beforona Moramanga
24	Filemonina ANDRIANANTENAINA	Amélioration des Tanimboly	ESSA Forêt	CDIA Beforona Moramanga
25	Liva RAVOAVY	Riz pluvial avec et sans brûlis	Faculté des sciences	CDIA Beforona Moramanga

26	Peter MESSERLI	Amélioration et alternative au tavy	Université de Berne – Institut géographique - CDE	CDIA Beforona Moramanga
27	Ulrike BONGARTZ	Les ravageurs	Université d'Heidelberg	CDIA Beforona
28	Adolphe LEHAVANA	Espèces pérennes de Tanimboly	Faculté des sciences	CDIA Beforona
29	Saholy Tiaray RAZAFINIAINA	Espèces pérennes de Tanimboly	Faculté des sciences	CDIA Beforona
30	Jutta NAMBENA	Intensification des tanimboly	Université de Heidelberg	CDIA Beforona Moramanga
31	Soava RAKOTOARISOA	PDC et CBRNM	CORNELL University	Beforona – Antanandava
32	Jacques POLLINI	TAVY (gestion et amélioration du tavy)	CORNELL University	Ambodilaingo
33	Frédéric COGET	Plantes médicinales du corridor forestier Est	HEPHO (Haute Ecole de la Province De Hainaut Occidental)	Amparafara, Ampitambe, Ambatovy, Anosibeana, Beforona
34	Andiramihajanarivo Lucien Aimé			
35	Stephan Edouard Rakotosamimanana	Memoire à Beforona, par la suite devenu employé de LDI à Miadana Mahajanga		
36	Razafindranjoha Fatimanirina Théodile	Etude comparative du FIEFE avec d'autres sources de financement analogue		Antananarivo
37	Soudjay Maolidy Ndriantokinanahary	Protection Intégrée du poivrier	ESSA	Agroman Fianarantsoa
38	Ranaivojaona Harivonjy	FIEFE : Reproductibilité du système	Université d'Antananarivo Filière Economie	Antananarivo
39	Randrianasolo Tojo Christian	Gestion Communautaire des Ressources Naturelles		
40	Andrianirina Armand Dieudonné	Etudes des Dynamiques des terroirs villageois et perspective de lancement d'association de culture de rente et vivrière	ESSA-Agriculture Antananarivo	Fianarantsoa (Kalalao & Ialamarina)
41	Andriantseho Mialy	Etude de filière au sein des différents sites du Programme Dette Nature : pour d'une part mise en place progressive de la Gestion Participative des Forêts et de contribuer à réduire la pression humaine sur les ressources naturelles ; et d'autre part pour	Dept Geographie -Es-Lettre/ Université Antananarivo	Tolongoina
42 et 43	Rady Soahary Noronantenaina & Ramaharo Vanona Horance Angelo	Etude de mise en place progressive d'une activité écotouristique autour de l'axe des chemins de fer FCE et à la réduction de la pression humaine sur les ressources naturelles du Corridor	ISTE - Fianarantsoa	Fianarantsoa
44	Rasolofomanana Raymond	Valorisation des fruits d'Uapaca bojeri pour la fabrication de Rhum	ESSA- Dept Industrie Agricoles et Alimentaire	Fianarantsoa
45	Randrianarisoa Salohitiana Elissa	Essai d'adaptation du Rosiers du Truquie	ESSA-Agriculture Antananarivo	Andoharanomaintso - Fianarantsoa
46	Rabetaliana Falihery	Analyse test de conformité des huiles essentielles de Rosa damascena à Madagascar	ESSA-Agriculture Antananarivo	Andoharanomaintso - Fianarantsoa
47	Christian Rakotoarinivo	Contribution à l'étude de mise en place d'une nouvelle filière à l'exemple des Rose Parumées (rosa Damascena et Rosa Centefolia) en vue de la production d'une huile essentielle pour le développement économique de Madagascar	ESSA-Agriculture Antananarivo	Andoharanomaintso - Fianarantsoa
48	Rasolondraibe Hosana Hery Laza	Contribution à la mise en place de base de données des Kolo Harena	CNTEMAD Fianarantsoa	Fianarantsoa
49	Maminirina Marie Angela	Secrétariat	CFP Laura Vicuna-Fianarantsoa	Fianarantsoa
50	Fanja +	Guidage : cas Andringitra.....	ISTE	Andringitra - Fianarantsoa
51	Andriamarolaza Tanjona	Rentabilité et viabilité d'un Projet de développement rural en phase d'autonomie : Etude du Financement et du micro-crédit au sein des Kolo Harena et de la Fédération dans le Site de LDI à Miarinarivo	ESSA-Agro-Management	
52	Ramasiiniaina Yolande Angela	L'organisation administrative pour l'optimisation, la performance et la qualité des services du secrétariat	CFC – Université de Fianarantsoa	Fianarantsoa

53	Raveloarikaja Domoina	Developpement Ecotouristique de la Forêt de Sahambavy	ESSA-Forêt Antananarivo	Sahambavy - Fianarantsoa
54	Rakotonirina Angelo	Valorisation de l'Ecotourisme dans le développement socio-économique de la zone périphérique du PN Ranomafana	Université d'Antananarivo DESS – Analyse et Politique Environnementale	Ranomafana Fianarantsoa
55	Lala Heriniaina Randrianary	Un exemple d'approche intégrée pour contribuer au développement réel du PN de l'Andringitra	Université d'Antananarivo ENS – Ampefiloha Filière Histoire et Géographie	Andringitra Fianarantsoa
56	RANDRIANARISOA Salohitiana Elissa	Experimentations en vue de la mise en place des roses parfumées à Madagascar pour la lutte contre la pauvreté et la protection de l'environnement Projet de lancement des <i>rosa damascena</i>	ESSA-Agriculture Antananarivo	Fianarantsoa